



KENWOOD®
HI/FI STEREO COMPONENTS

SERVICE MANUAL

KR-730 KR-750

An item of adjustment is written in three languages — English, French and German.
Un article sur les réglages est écrit en trois langues, Anglais, Français et Allemand.
Ein Artikel der Abgleich wird auf drei Sprachen. Englische, Freanösisch und Deutsch
geschriebrn.

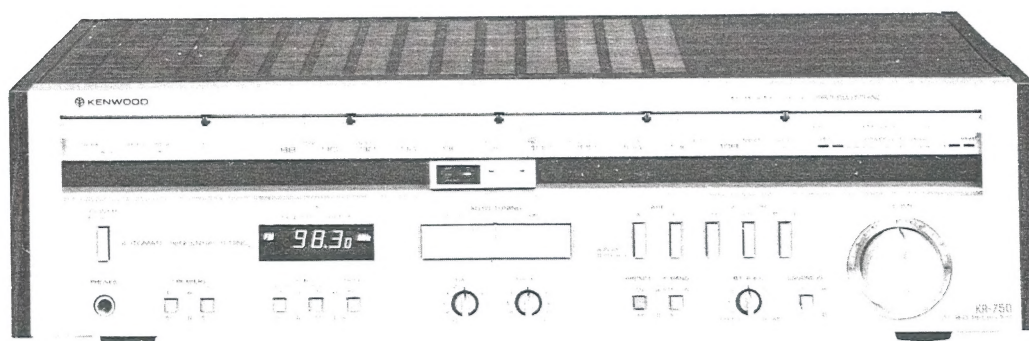


Photo: KR-750

STEREO RECEIVER

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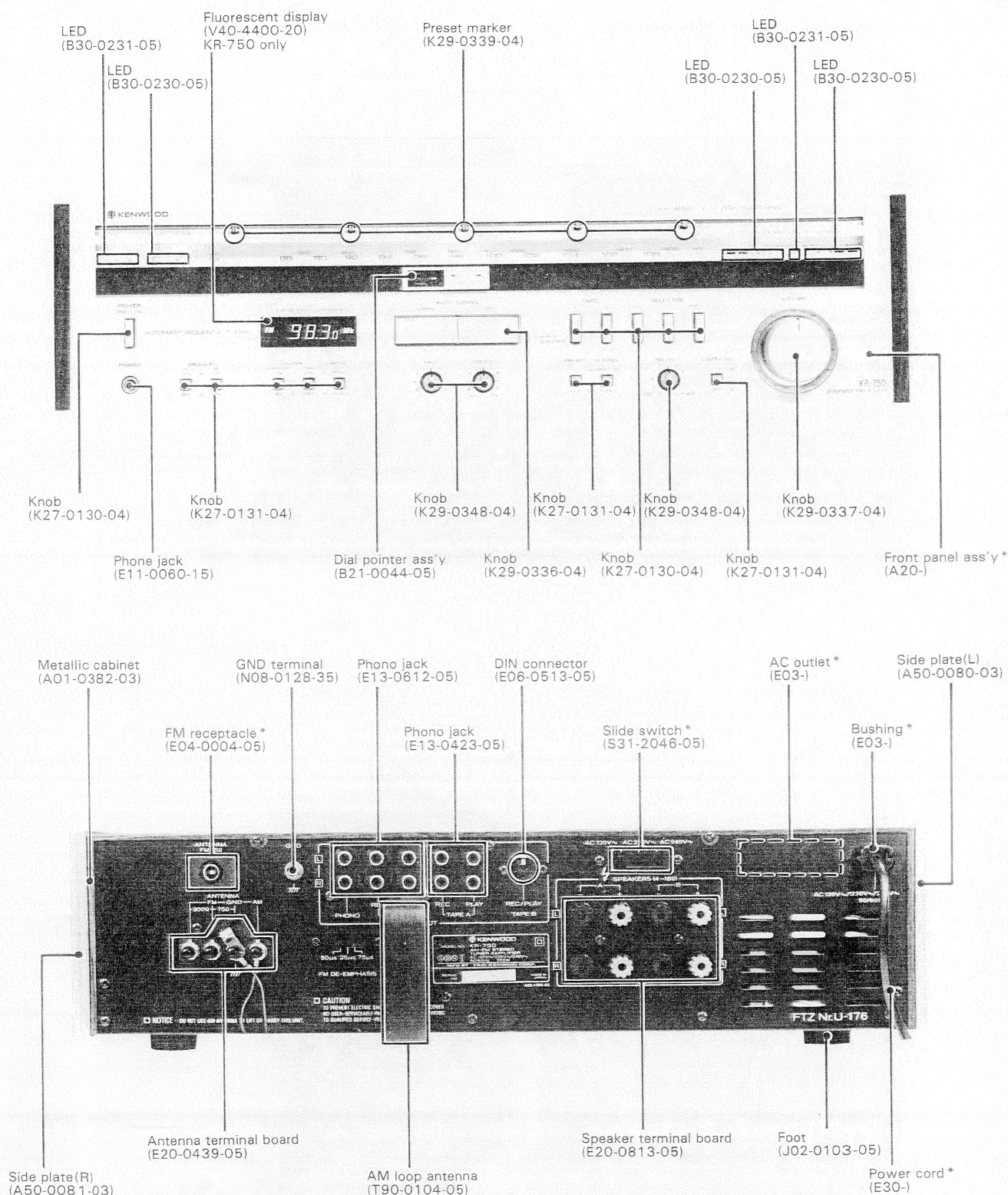


Note:
Component and circuitry are subject to modification to insure best operation under differing local conditions. This manual is based on, the U.S. (K) standard, and provides information on regional circuit modification through use of alternate schematic diagrams, and information on regional component variations through use of parts list.

Region	Code
U.S.A.	K
Canada	P
PX (Far East)	U
PX (Europe)	UE
Australia.....	X
Europe and Scandinavia.....	E
England	T
South Africa	S
Other Areas.....	M
Audio Club.....	H
U.S.A. (KR-755).....	K

There is no plan for producing units of S type.

EXTERNAL VIEW



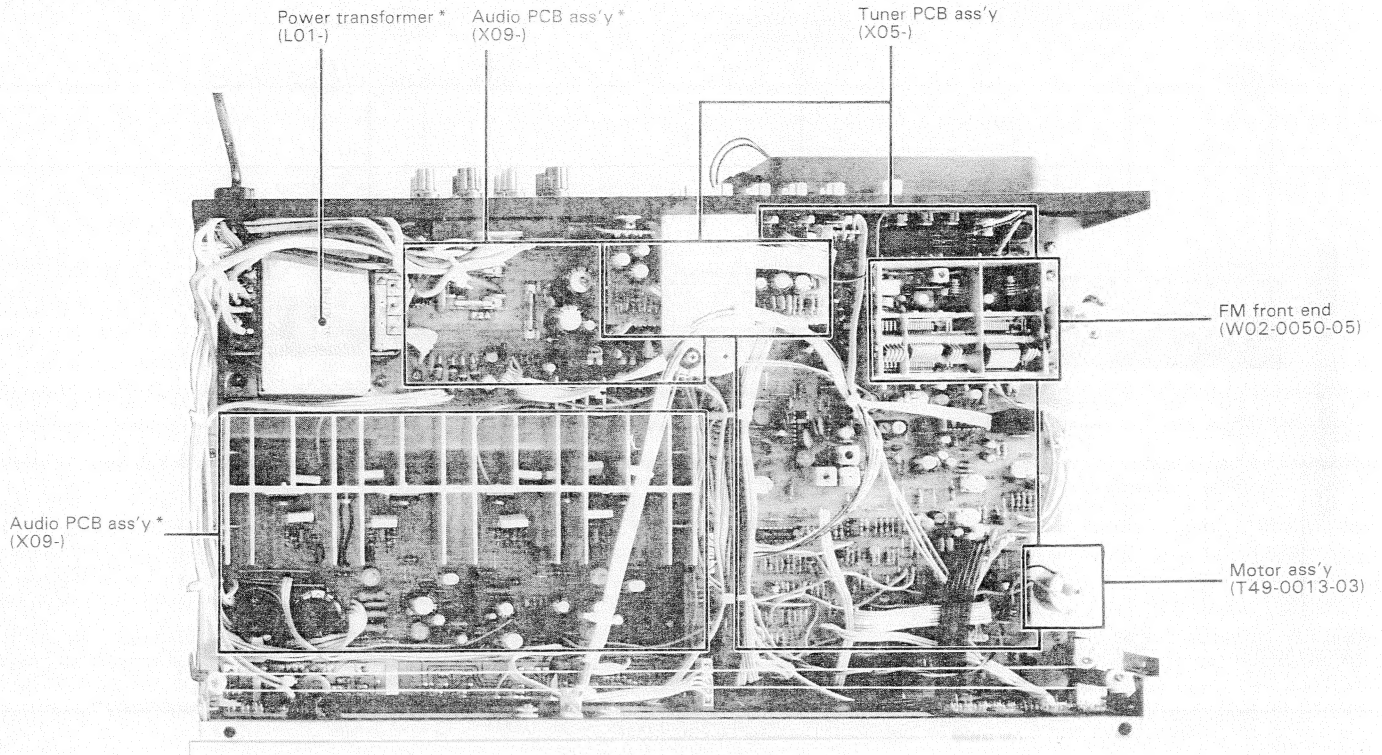
Front view is KR-750 — both E type.

Rear view is KR-730

* Refer to Parts List on page 29 or 31.

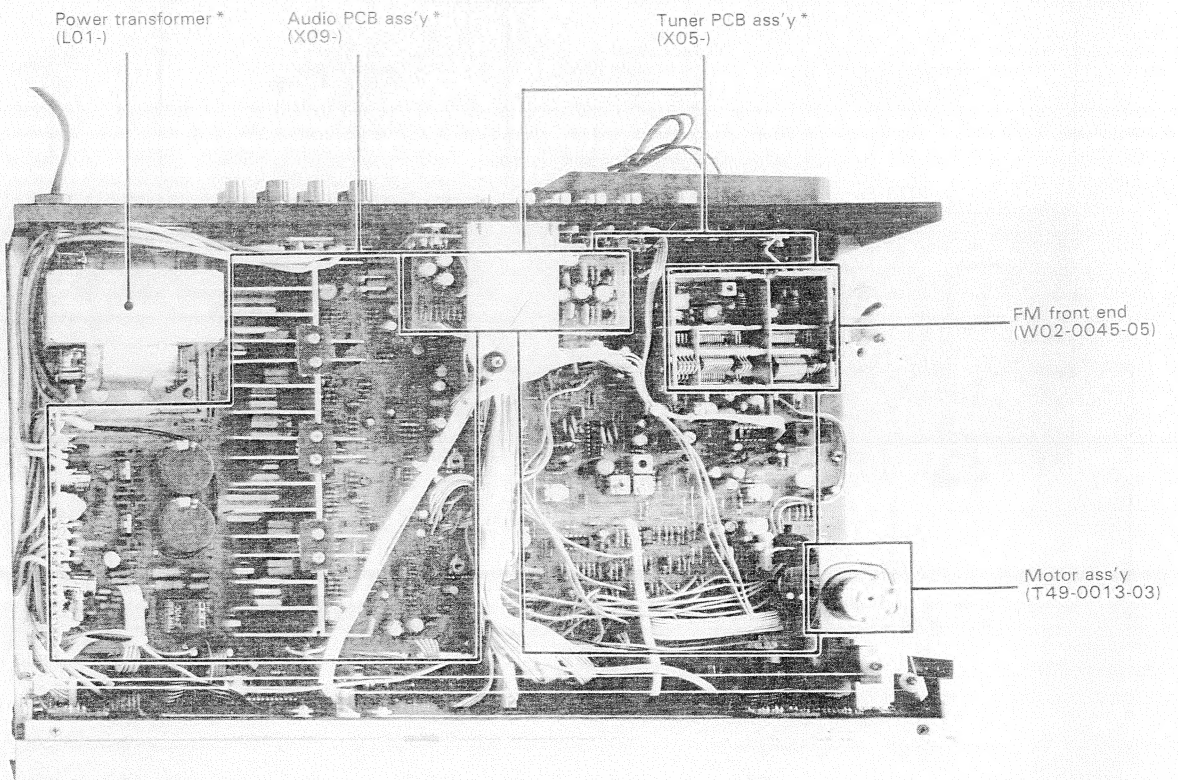
INTERNAL VIEW

KR-730



* Refer to Parts List on page 29 or 31.

KR-750

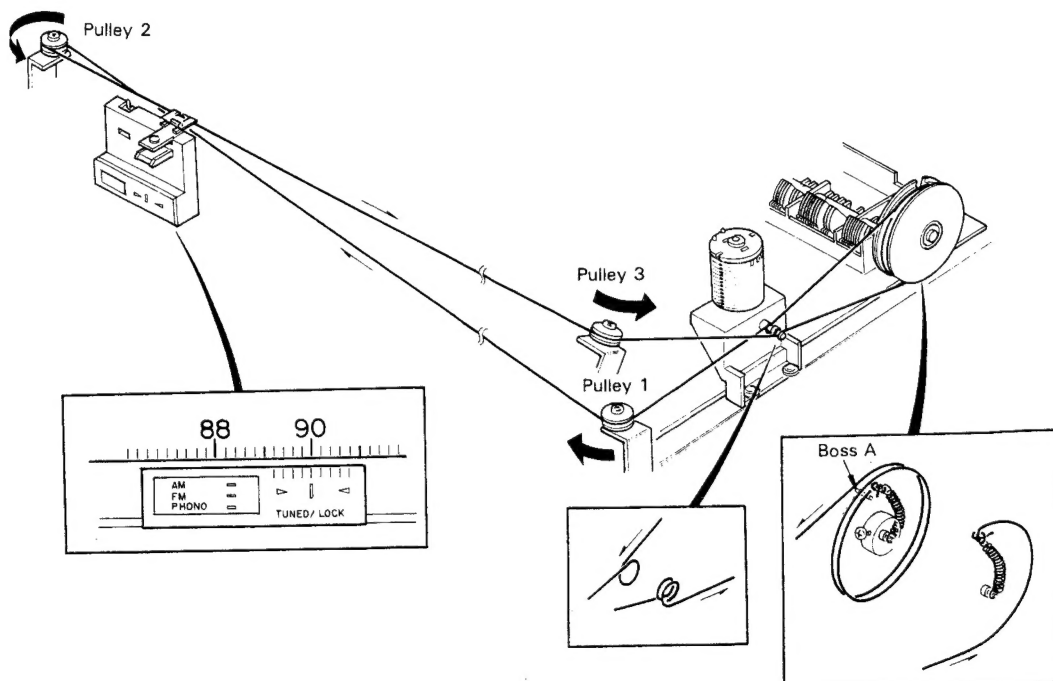


* Refer to Parts List on page 29 or 31.

DIAL CORD STRINGING / DISASSEMBLY FOR REPAIR

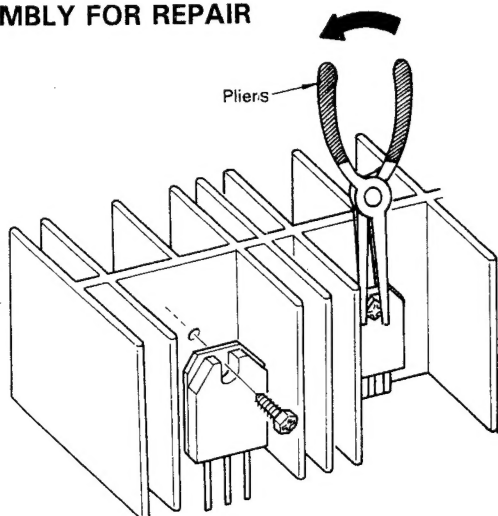
DIAL CORD STRINGING

1. Tie the end of the dial cord to the dial spring and hook the dial spring to boss A.
2. Set the dial pulley as illustrated.
3. Wind the dial cord to the dial pulley twice and wind around the motor's drive shaft once starting from the upper side.
4. Dress the dial cord to pulley 1 through 3 in the direction of the arrow.
5. Wind the dial cord to the motor's drive shaft twice starting from the lower side.
6. Wind the dial cord to the dial pulley half a turn starting from the lower side.
7. Tie the end of the dial cord to the dial spring and unhook the dial spring from the boss A.
8. Receive a 90 MHz signal and then mount the dial pointer so that the TUNED/LOCK LED aligns with 90 on the FM dial calibrations.



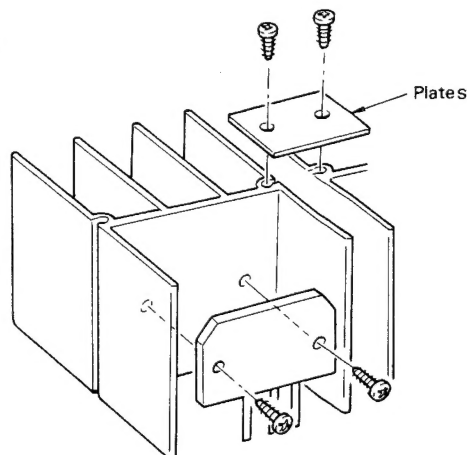
DISASSEMBLY FOR REPAIR

KR-730



1. Unsolder the leads of the transistor.
2. Loosen the screw (hex-head) for the transistor with pliers.

KR-750

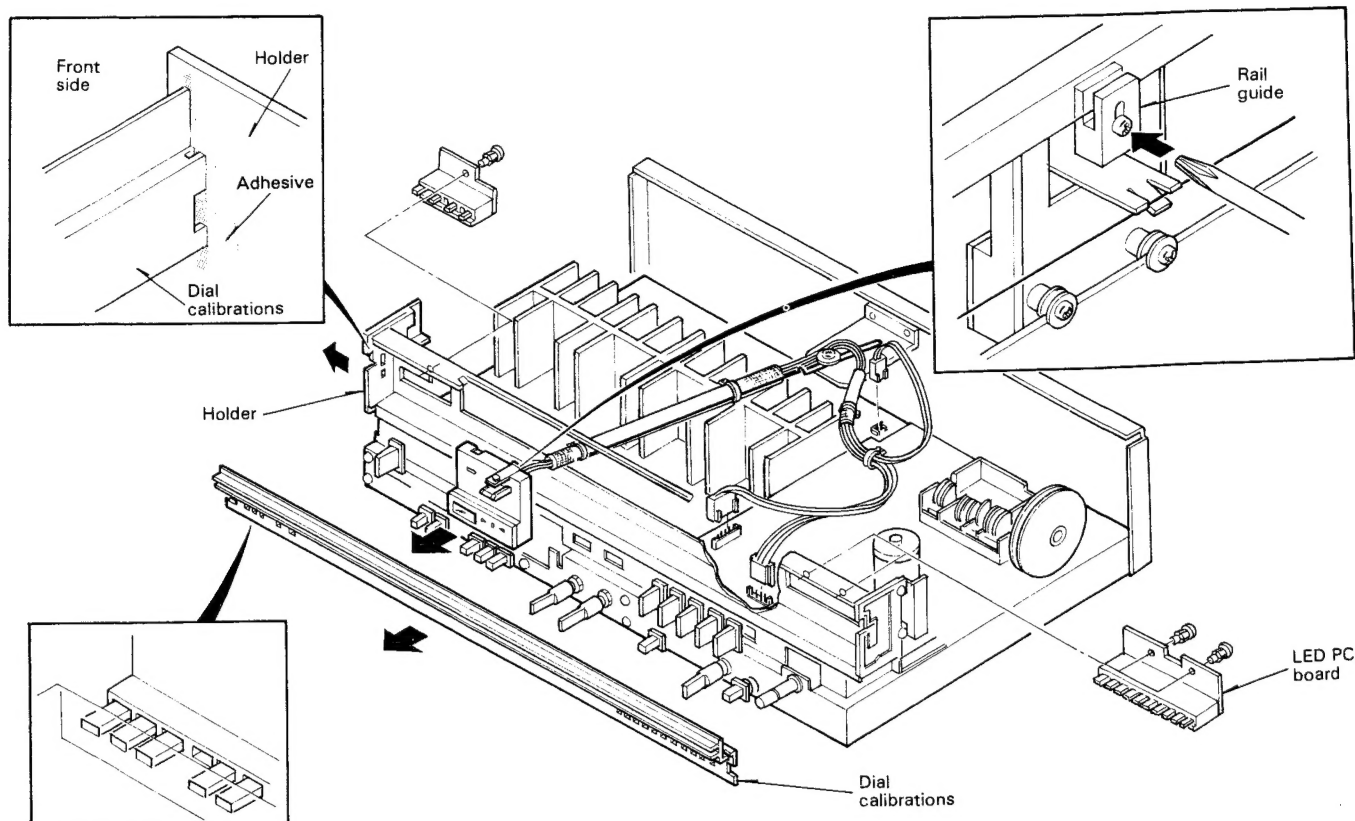


Since heat sink is provided for each power transistor, you can remove it by the following procedures.

1. Unsolder the leads of the transistor.
2. Loosen the screw and remove the plate on the top of the heat sink.
3. Pull the heat sink up.
4. Loosen the screws of the transistor.

DISASSEMBLY FOR REPAIR

REMOVAL OF DIAL POINTER ASSEMBLY



REMOVAL OF DIAL POINTER ASSEMBLY

1. Loosen the screw retaining the rail guide at the upper rear of the dial pointer assembly and shift the rail guide down.
2. Pull out the connectors of the dial pointer assembly.
3. Take the adhesive off from the holder and the dial calibrations and from the dial cord and the dial pointer assembly.
4. Carefully separate the dial calibrations from the holder by spreading the holder outward.
5. Now you can remove the dial pointer assembly forward.

CAUTIONS FOR INSTALLING

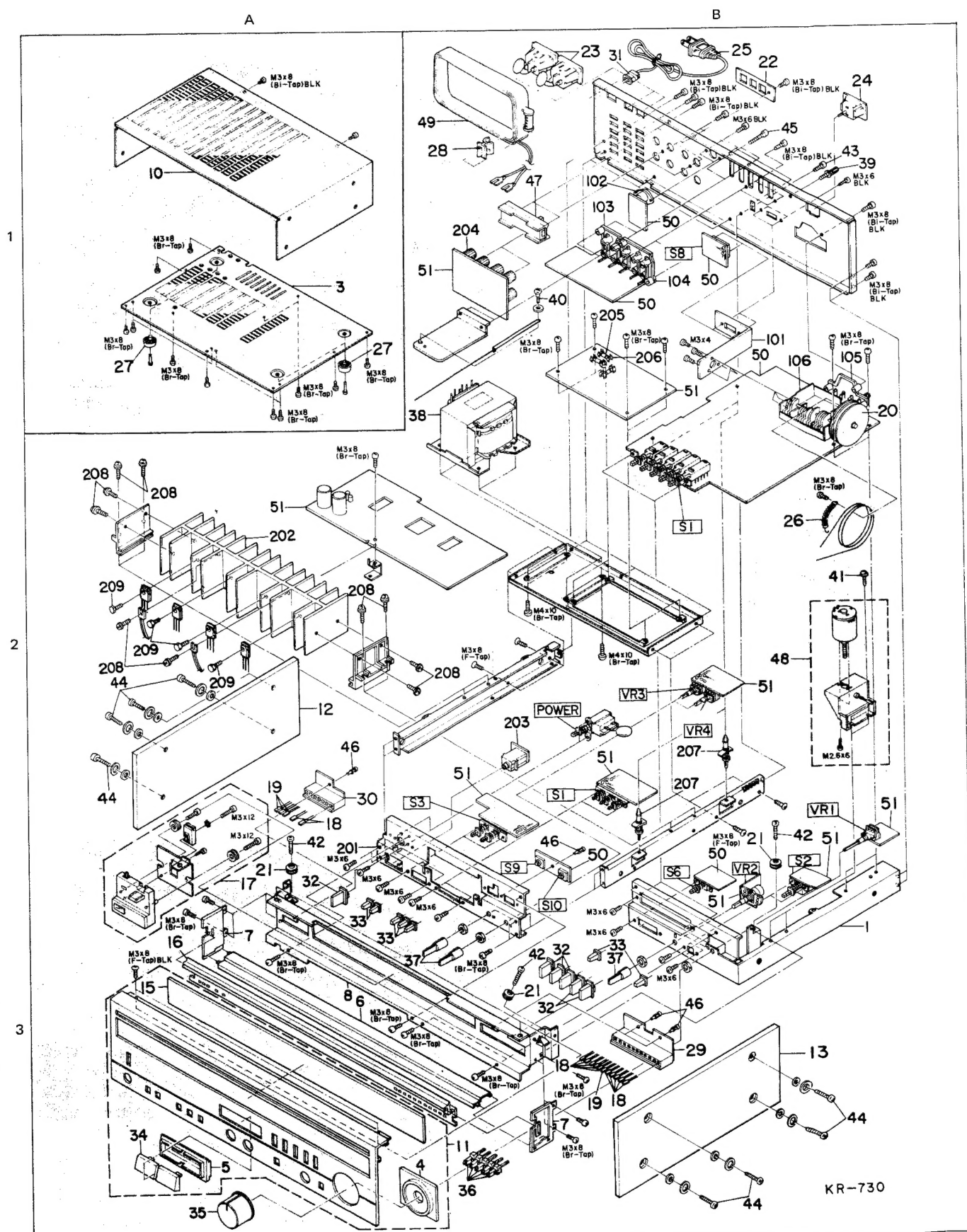
Dial pointer assembly

1. When tightening the screw retaining the rail guide, first tighten the screw loosely.
2. If the rail guide is overlifted, the dial pointer assembly may move clumsily or may even get stuck.
3. Confirm that the dial pointer assembly moves smoothly from end to end before tightening firmly.

Dial calibrations

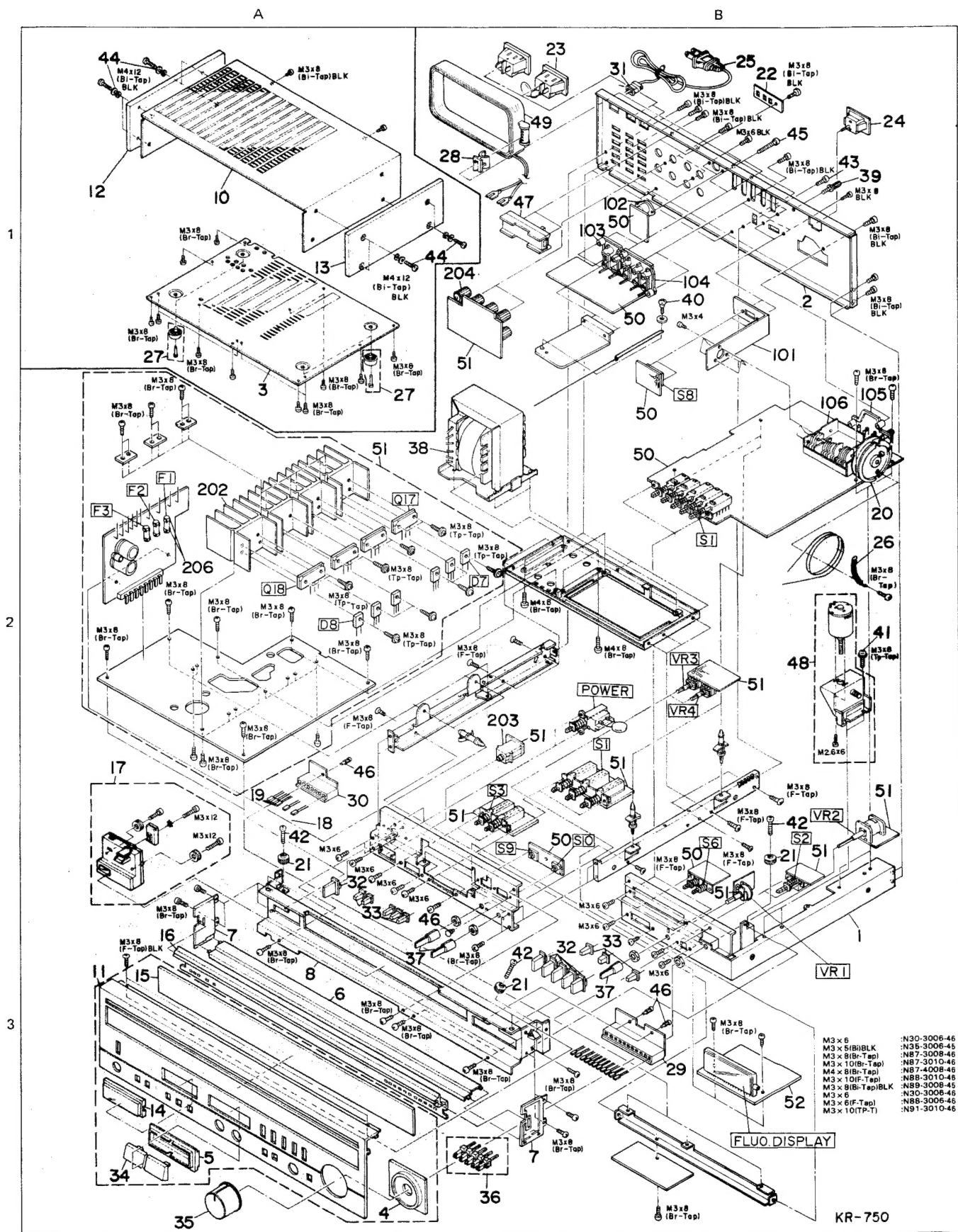
1. When installing the dial calibrations, confirm that all LEDs at the both ends are fit in the holes.
2. If any of the LEDs are stuck, pull out the rivet of the LED PC board and move the PC board to fit LEDs in place and push the rivet in again.

EXPLODED VIEW



Refer to Parts List on page 29.

EXPLODED VIEW



Refer to Parts List on page 31.

CIRCUIT DESCRIPTION

1. Motor Drive Signal Generator

The circuit shown in figure 2 starts and stops the motor and controls the direction of rotation. The initial state of the circuit after power is switched on is shown in table 1.

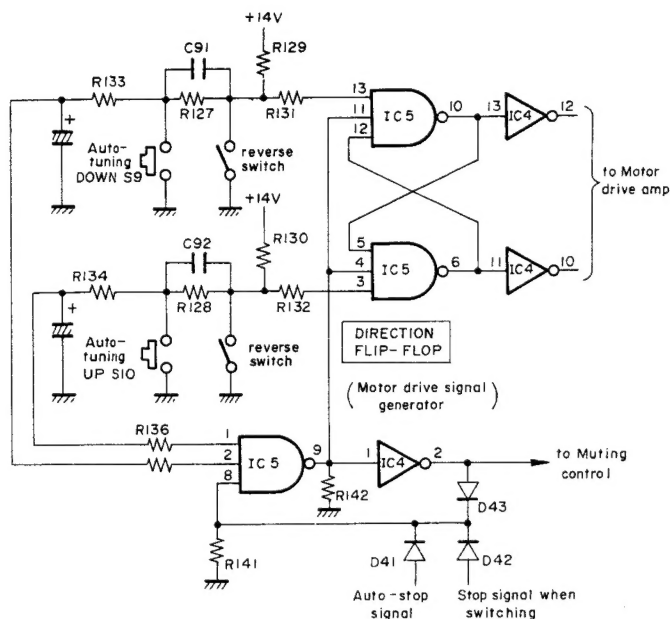


Fig. 2 Motor Drive Signal Generator

Pin No. Condition	1	2	3	4	5	6	8	9	10	11	12	13
Initial state	H	H	H	L	H	H	L	L	H	L	H	L
Running S9 Pressed	H	L	H	H	L	L	L	H	H	H	L	L
Left S9 Released	H	H	H	H	H	L	L	H	H	H	L	H

Table 1 Logic Levels of Pins of IC5

Pins 1, 2, 3 and 13 of IC5 are held to "H" (high level) by +14 V (See figure 2). After the power is turned on, the base of Q13 (in the Schmitt circuit) is raised for a short time by R97 and C87, thus Q13 is turned on. Therefore, Q14 is OFF and therefore "H" is applied to pin 8 of IC5 through D41. Then, all the inputs of the NAND gate is "H" so pin 9 becomes "L" (low level) and is applied to pin 4 and pin 11. Since pin 2 of IC4 is "H", pin 8 of IC5 is kept "H" through D43. Pin 6 and pin 10 are "H" because pin 4 and pin 11 are "L", and their levels are applied to pin 12 and pin 5, respectively. Their output levels are inverted by IC4. Thus, pin 10 and pin 12 of IC4 are "L" as shown in figure 2.

When the DOWN button (S9) is pressed, the levels of the pins of IC5 changes as shown in the second line of table 1. That is, pin 2 and pin 13 become "L" and pin 9 becomes "H". Then, pin 4 becomes "H", pin 6 becomes "L", therefore, pin 10 of IC4 is "H". On the other hand, pin 10 of IC5 does not change so that pin 12 of IC4 is kept "L". Therefore, the motor is driven so that the dial pointer moves to the left. (For motor driver, refer to Chapter 2.)

The dial pointer moves to the left until an "H" is applied to pin 8 of IC5 or pin 3 of IC5 is set "L" by the dial pointer reverse switch. (For the stop signal generator, refer to

Chapter 3.) While the dial pointer is moving, pin 8 of IC5 is "L" as shown in table 1. This is because, when the muting output signal appears at pin 12 of IC2 (in the FM NARROW mode of KR-750 and in the FM mode of KR-730), the NOR circuit, Q12, is ON, Q13 is OFF and Q14 is ON. If the selector (S1A ~ S1C) is switched over, the stop signal ("H") is applied to pin 8 of IC5 through D42. Therefore, the dial pointer stops.

When a broadcasting signal is received, pin 12 of IC2 drops to 0 V. When the S/M curve converter detects the correct tuning point, its output becomes 0 V. Therefore, the base of Q12 (NOR) is "L". Thus, Q12 is OFF, Q13 is ON and Q14 is OFF. Then, the auto-stop signal ("H") is applied to pin 8 of IC5 through D41.

While the auto tuning button S9 is kept pressed, the motor moves regardless of these stop signals. However, after the button has been released, pin 9 of IC5 becomes "L" when pin 8 becomes "H", because both pins 1 and 2 are "H". As both pins 6 and 10 are "H", pins 10 and 12 of IC4 become "L" and the motor stops.

2. Motor Drive Circuit

The motor drive signals explained in Chapter 1 are applied to operational amplifier (op amp), IC6.

When the dial pointer is to be moved to the left, "H" appears at pin 10 and "L" at pin 12 of IC4. Therefore, the op amp (IC6) operates as a non-inverting amplifier as shown in figure 4a and positive voltage will appear at the output (pin 1). On the other hand, when the dial pointer is to be moved to the right, "H" appears at pin 12 and "L" at pin 10 of IC4. Therefore, the op amp (IC6) operates as an inverting amplifier as shown in figure 4b and negative voltage will appear at the output (pin 1).

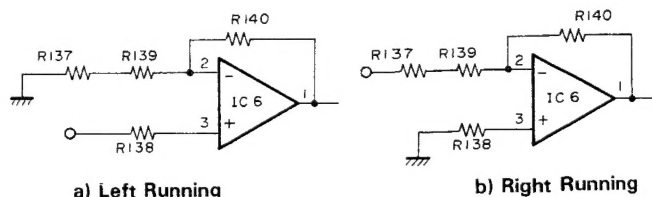


Fig. 4 IC6 (OP Amp)

When S9 or S10 is kept pressed, the base of Q25 is grounded through D39 or D40, respectively. Therefore, Q25 is ON and Q24 is ON, so that R145 is shorted. Then, the output voltage divided by R151 and R152 appears at point (A). In this case, the motor rotates at high speed.

When S9 or S10 is released, Q25 is OFF and Q24 is OFF. Therefore, the output voltage divided by R145, R151 and R152 appears at point (A). In this case, the motor rotates at low speed. That is, changing the base current of Q22 or Q23 controls the motor's speed. Table 2 shows voltages of points shown in figure 3.

Since on end of the motor is grounded, by applying a positive voltage to the other end, the motor rotates so that the pointer moves to the left, and vice versa. That is, setting the voltage at point (A) to positive, turns Q22 ON and positive voltage is applied to the motor, and by setting it to negative, Q23 is turned ON and a negative voltage is applied to the motor.

CIRCUIT DESCRIPTION

3-1 FM noise detector

The FM noise detector detects the noise component of the FM detection output from IC2, and outputs a DC signal. Noise detector is shown in figure 6. The resonance frequency f_N of the tuning circuit connected to the collector of Q10 is given by

$$f_N = \frac{1}{2\sqrt{(L2) \times (C82)}}$$

$$\approx \frac{1}{2\sqrt{6.8 \times 10^{-3} \times 120 \times 10^{-12}}}$$

$$\approx 176 \text{ (kHz)}$$

When it resonates with a noise signal of about 176 kHz, the noise signal is amplified by Q10 and is then detected by D20 and D21 so that a DC component is output. This output is about 6 V when the tuner is detuned (out of the S curve range) and about -3 V when tuned (within the S curve range). This signal is applied to the base of Q12 in the FM NARROW mode for KR-750 and in the FM mode for KR-730.

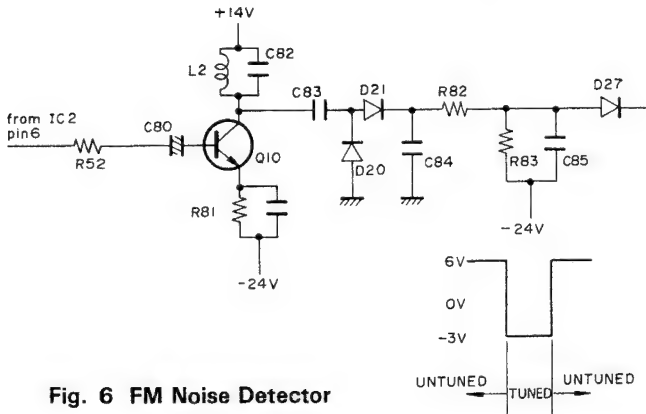


Fig. 6 FM Noise Detector

3-2 S/M Curve Converter

This circuit detects the S curve signal and passes through the ± 6 V limiter where the AFC signal is obtained, then the S curve signal is converted into the M curve signal to detect the correct tuning point. Potential changes at points (A)~(E) shown in figure 7 are shown in figure 8.

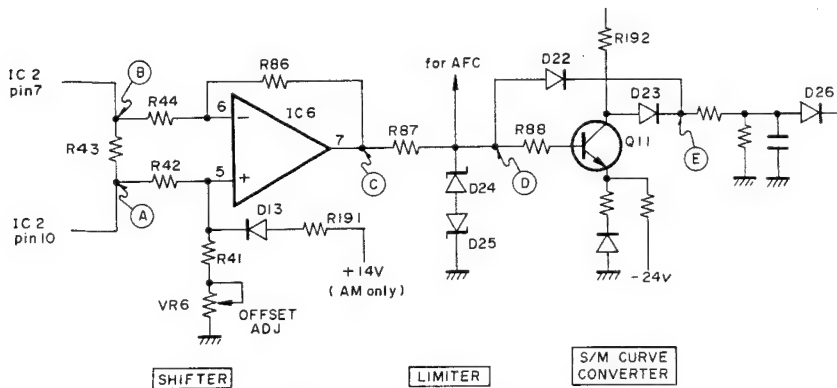


Fig. 7 S-Curve Detector

Pin 10 of IC2 is a constant current source and its voltage is fixed to about 5.6 V. The inclination of the S curve is different between AM and FM. This is because coil L1 (18 mH) is added in AM mode by the phase shifter selector Q1. Therefore, the inclination of the S curve is inverted. Pin 6 of IC6 is an inverting input terminal and pin 10 of IC2 is fixed. Therefore, the input waveform at point (B) is inverted and centered at 0 V as shown in figure 8b. D24 and D25 are 6 V Zener diodes and they act as a ± 6 V limiter when they are connected in this way. (Fig. 8c)

The S/M curve converter is provided to detect the correct tuning point (0 V cross point of S curve) exactly. Q11, D22 and D23 change their states as shown in table 4 according to the polarity of the signal at point (D), and the output waveform is as shown in figure 8-d. This signal is applied to the base of Q12 through D26.

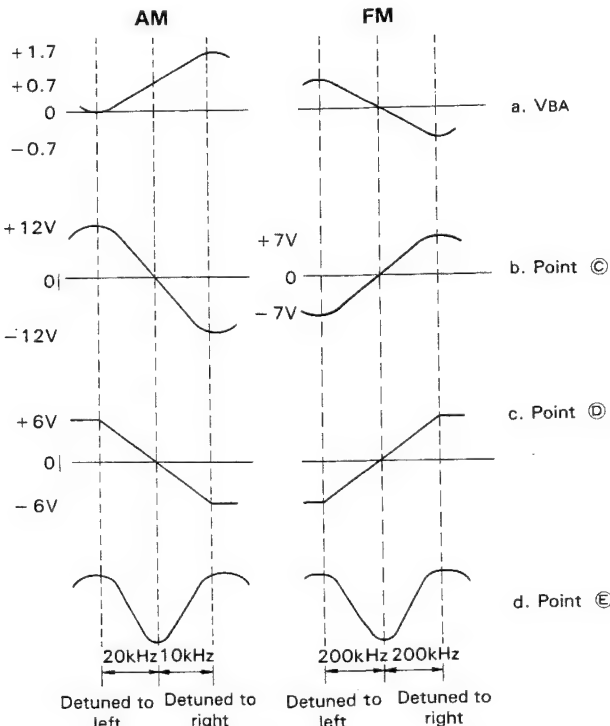


Fig. 8 Voltages at Each Point in Figure 7

Polarity at point D	Q11	D22	D23
+	ON	ON	OFF
0	ON	OFF	OFF
-	OFF	OFF	ON

Table 4 ONs and OFFs of Q11, D22, D23

CIRCUIT DESCRIPTION

3-3 FM Muting Signal

Pin 12 of IC-2 is "H" when the tuner is detuned and "L" when tuned. This signal is applied to the base of Q12 through D28 in the FM NARROW mode of KR-750 and in the FM mode of KR-730.

3-4 AM/FM Signal Level Detector

The signal level meter output from pin 13 of IC2 is integrated by D12, R115 and C89, and applied to the base of Q18. When the signal level is high, Q18 is turned ON and the collector level becomes "L". Therefore, D18 is cut off. Thus, Q12 turns ON when the signal level is low and OFF when the signal level is high in the FM WIDE mode of KR-750 and in the AM mode of KR-730.

3-5 Preset Stop Signal

The phototransistor in the dial pointer assembly is normally ON because it receives light from the lamp. At this time the emitter level of Q19 is "L", about 0 V. When a preset marker screens the light, Q19 is turned OFF. Therefore, the emitter level of Q16 rises to "H", about 10 V and will be used as the stop signal.

4. Stop Signal at Selector Swichover

This circuit generates the stop signal when the selector is switched over.

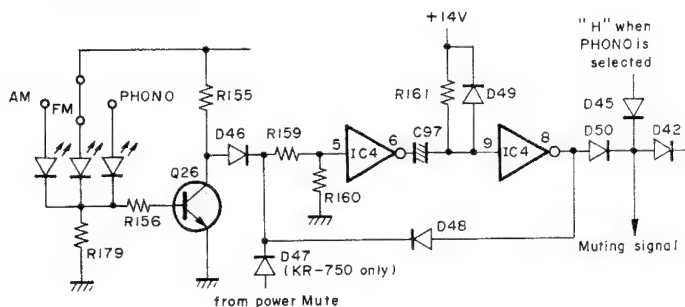


Fig. 9 Stop Signal Generator

The base of Q26 is usually biased via a selector indicator LED in the dial pointer assembly, so it is ON. Therefore, the collector level of Q26 is "L", pin 6 of IC4 is "H", pin 9 is "H" and pin 8 is "L". When the selector is switched over, no voltage is applied to LEDs for a short time (T_1 : undefined) while no contacts complete the circuit.

Therefore, Q26 is turned OFF during this period. This level change at the collector of Q26 triggers the monostable multivibrator (IC4). When Q26 turns OFF, pin 5 of IC4 becomes "H" and pin 6 becomes "L". At the same, pin 9 of IC4 is "L" and pin 8 is "H". Next, when the selector is set to AM, FM or PHONO position, Q26 is turned ON. Although the collector of Q26 becomes "L", "H" level at pin 8 of IC4 is applied to pin 5 through D48. On the other hand, the voltage across C97 which is charged through R161 is applied to pin 9. Therefore, the voltage at pin 9 varies as shown in figure 10d. When the voltage at pin 9 exceeds the threshold level of IC4, pin 8 drops to "L". Thus, an stop signal ("H") with a width of T_2 [$= 0.69 \times (C97) \times (R161) = 0.69 \times 1 \times 10^{-6} \times 470 \times 10^{-3} = 0.32$ (sec)] is output from pin 8 as shown in figure 10e. D49 absorbs the part indicated by the

dotted line to protect the C-MOS IC from breakage. When the selector is switched to PHONO from AM or FM, +14 V is applied to pin 8 of IC5 through D45 and D42. Therefore, pin 9 is "L" and the flip flop returns to its initial state.

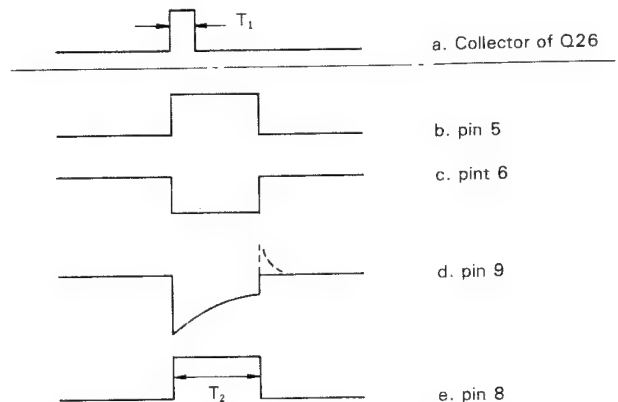


Fig. 10 Waveform of IC4

5. AFC Control Signal

AFC control is performed by the motor for FM and by the motor and varicap diode for AM. The auto stop signal, the motor stop signal, the stop signal at selector swichover and the power muting signal are applied to the NOR circuit (Q16) to control the gate of Q20 and Q21.

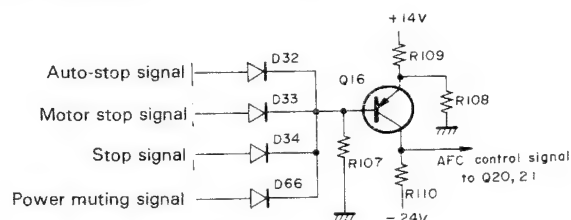


Fig. 11 AFC Control Signal

5-1 AFC by motor

The S curve signal shown in figure 8c is applied to the source of Q20. When Q16 is ON, the collector level is +14 V. Therefore, Q20 is ON and the S curve signal is applied to the motor drive circuit (figure 3) through R123.

i) FM

For FM, S curve signal is connected to pin 3 of IC6 through R123 (non-inverting input) and the gain G_{FM} of the motor drive circuit is 14.7 dB. The FM S curve signal level increases when the tuning frequency shifts to high frequencies and vice versa. Therefore, the voltage at pin 6 of IC6 varies as shown in figure 13a.

ii) AM

During AM reception, S curve signal is connected to pin 2 of IC6 through R123 (inverting input) and the gain G_{AM} is 16.6 dB. The AM S curve signal level decreases when the tuning frequency shifts to high frequencies and vice versa. Therefore, the voltage at pin 6 of IC6 changes as shown in figure 13b. As shown in figure 13, when the tuning frequen-

CIRCUIT DESCRIPTION

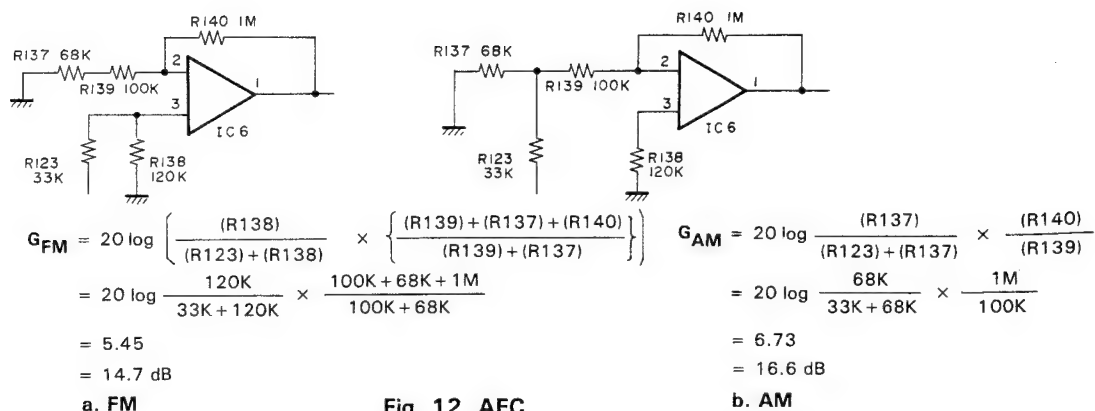


Fig. 12 AFC

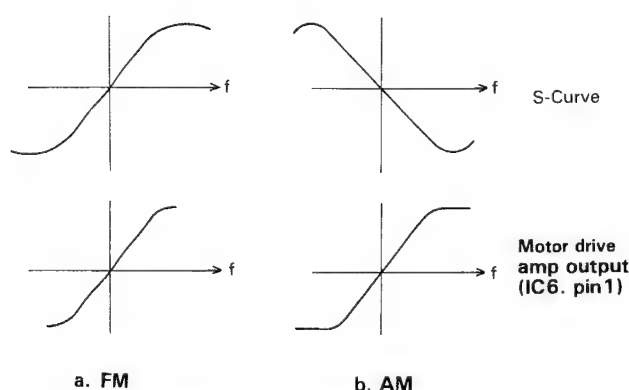


Fig. 13 Motor Drive Signal for AFC

cy shifts to high frequencies, a positive voltage is applied to the motor drive circuit and Q22 is turned on to move the dial pointer to low frequencies. When the dial pointer reaches the correct tuning position, the stop signal is generated and it stops. When the tuning frequency shifts to low frequencies, a negative voltage is applied to the motor drive circuit so that Q23 is turned on and the dial pointer moves to high frequencies. When the dial pointer reaches the correct tuning position, the stop signal is generated and it stops.

Further, the varicap diode is used for AM AFC. The voltage shift from the center of the S curve is used to control the local oscillator frequency. This circuit is provided to prevent the dial pointer from chattering. The AFC signal passed through the limiter shown in figure 8c (AM) is applied to the source of Q21 as the AFC signal. When Q16 is ON, the collector voltage is +14 V and so Q21 is ON. Then, a voltage is applied to the varicap diode if there is an AFC signal. When detuned to a higher frequency, the voltage applied to D11 decreases, so that the capacitance of the varicap diode increases. Therefore, the local oscillator frequency is lowered to correctly tune to the signal. When detuned to a lower frequency, the voltage applied to D11 increases, so that the capacitance of the varicap diode decreases. Therefore, the local frequency is increased to correctly tune to the signal.

Other Circuits

6-1 Muting Control

This circuit mutes the output while the dial pointer is moving. (See figure 15.) When the dial pointer starts moving, pin 2 of IC4 drops to "L". Then, pin 3 of IC4 is dropped to "L"

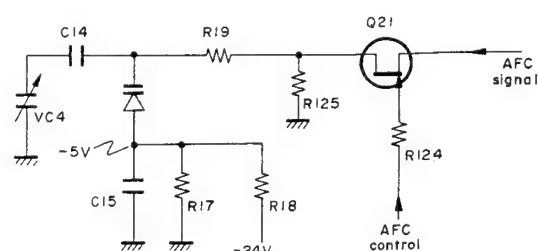


Fig. 14 Chattering Prevention Circuit for AM Auto Tuning

through D44. Pin 3 of IC4 is also connected to the collector of Q14, which is always "L" except at the time of auto-stop, via R162 and D29. Pin 4 of IC4 is "H" while the dial pointer is moving, and this "H" is applied to the base of Q15 through D30. The muting signal ("H") is also applied to the base of Q15 through D31 from the cathode of D50 in figure 9 when the selector is switched over or PHONO is selected. Therefore, Q15 is turned OFF and the collector level becomes -24 V, so that the muting FETs Q2 and Q3 are turned OFF, resulting in no sound being output. When the dial pointer stops, pin 3 of IC4 is set to "H" and pin 4 is "L". Since the anode of D31 is also "L", Q15 is turned ON and the collector voltage becomes about +9 V.

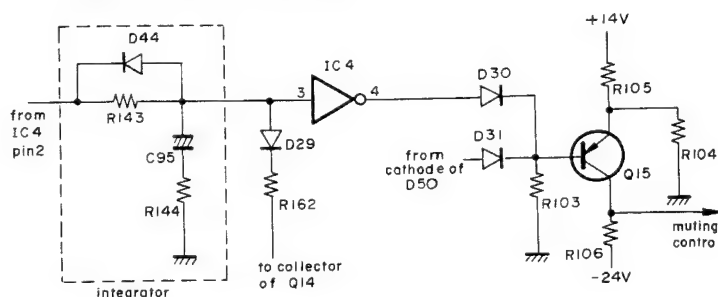


Fig. 15 Muting Control

Therefore, both Q2 and Q3 are turned ON, and the muted output is released. The voltage at pin 3 of IC4, however, does not exceed the threshold level immediately after the dial pointer has been stopped since an integrator (R143, R144

CIRCUIT DESCRIPTION

and C95) is connected in parallel with D44.

6-2 TUNED LED Driver

i) AM

+14 V is applied to the base of Q30 through D60 to turn it ON. Therefore, Q29 is OFF, and Q28 is ON because it is biased through R173 and D54. Then, Q27 is turned ON by the muting-off signal (lock signal: +12 V when a signal is received and -24 V when no signal is received) when a broadcast signal is received, and the TUNED LED lights.

ii) FM (AUTO)

In the FM AUTO mode, the preset switch is in the OFF position. Therefore, the collector of Q29 is not supplied with the power. As, Q29 is OFF, Q28 is ON and Q27 will be turned ON to light the TUNED LED when a broadcast signal is received.

iii) FM (PRESET)

In the FM AUTO mode, when the preset switch is turned ON after a desired preset station has been tuned, the collector of Q29 is supplied with the power through the preset switch. Therefore, the astable multivibrator consisting of Q28 and Q29 starts operating so that the TUNED LED flickers. When the preset marker is shifted and set to the correct position in this condition, the TUNED LED stops flickering. This is

because the preset stops signal (+10 V when the preset marker is in the same position as the dial pointer, otherwise 0 V) is applied to the base of Q30 through D57 to turn it ON, and Q29 is turned OFF. This function is provided for easy and precise setting of preset markers.

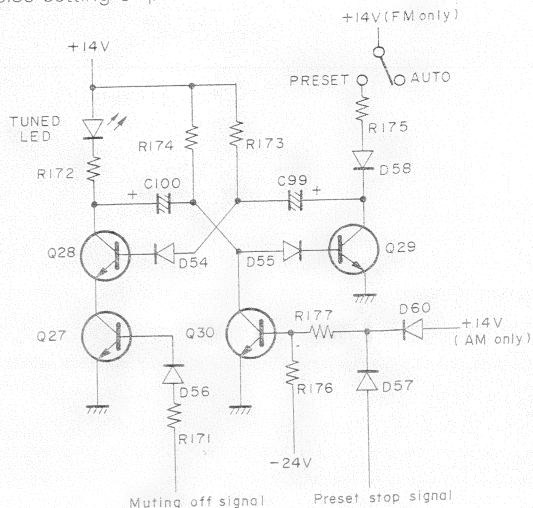


Fig. 16 TUNED LED Driver

ADJUSTMENT/REGLAGES/ABGLEICH

TEST INSTRUMENT

Oscilloscope
AM signal generator
FM signal generator
Audio generator
AC voltmeter
FM multiplex generator
Frequency counter
DC voltmeter
Distortion meter
Dummy antenna

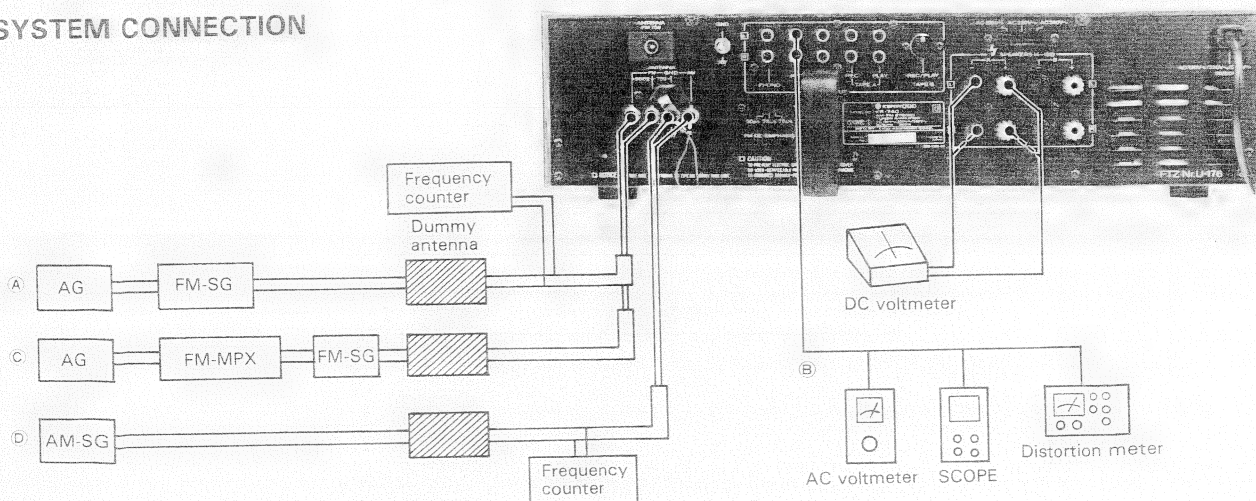
APPAREILLAGE

Oscilloscope
Générateur MA
Générateur MF
Générateur audio fréquences
Voltmètre CA
Générateur multiplex stéréo
Fréquence-mètre
Voltmètre CC
Distorsion-mètre
Antenne fictive

PRÜFINSTRUMENTE

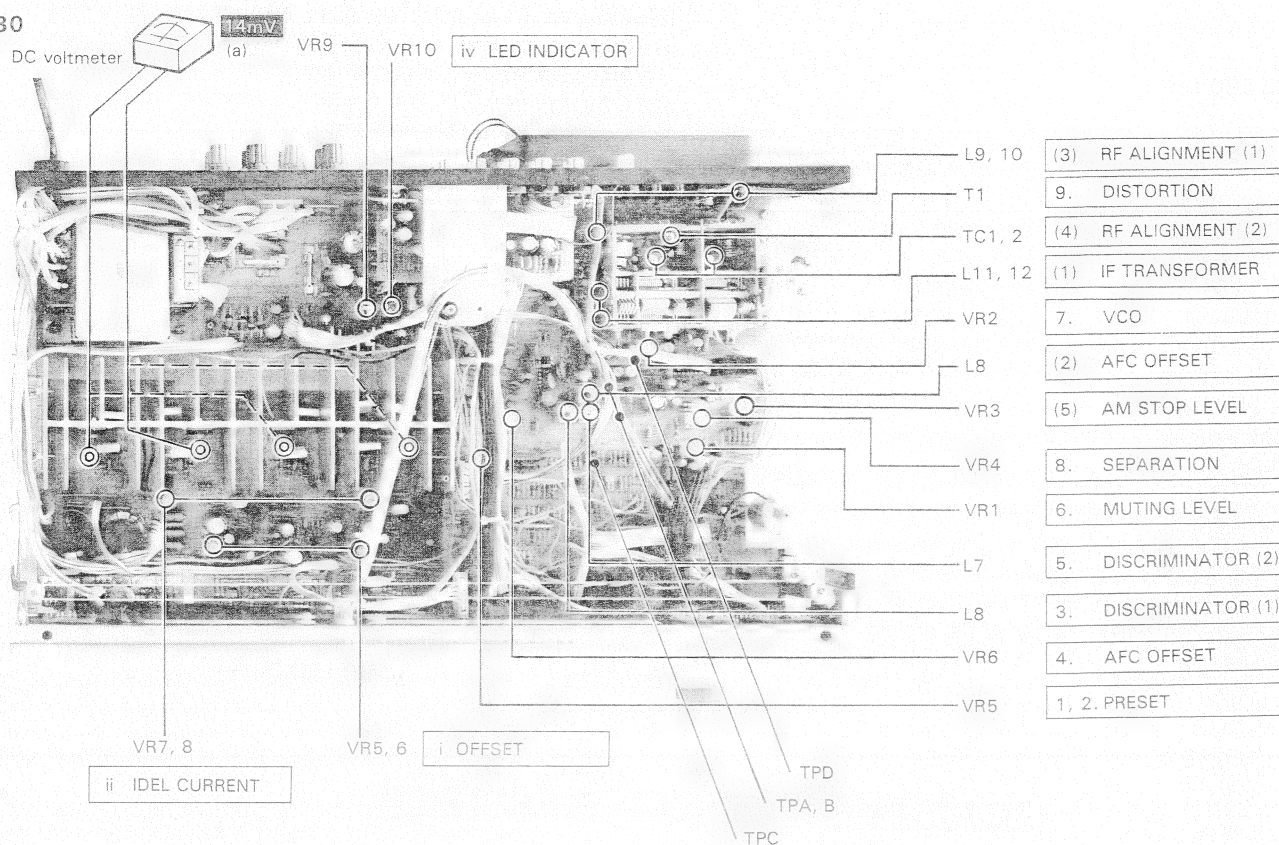
Oszilloskop SCOPE
MW-Signalgenerator AM-SG
UKW-Signalgenerator FM-SG
NF-Signalgenerator AG
Wechselspannungsmesser
UKW-Multiplexgenerator FM-MPX
Frequenzzähler
Gleichspannungsmesser
Klirrfaktormesser
Antennennachbildung

SYSTEM CONNECTION

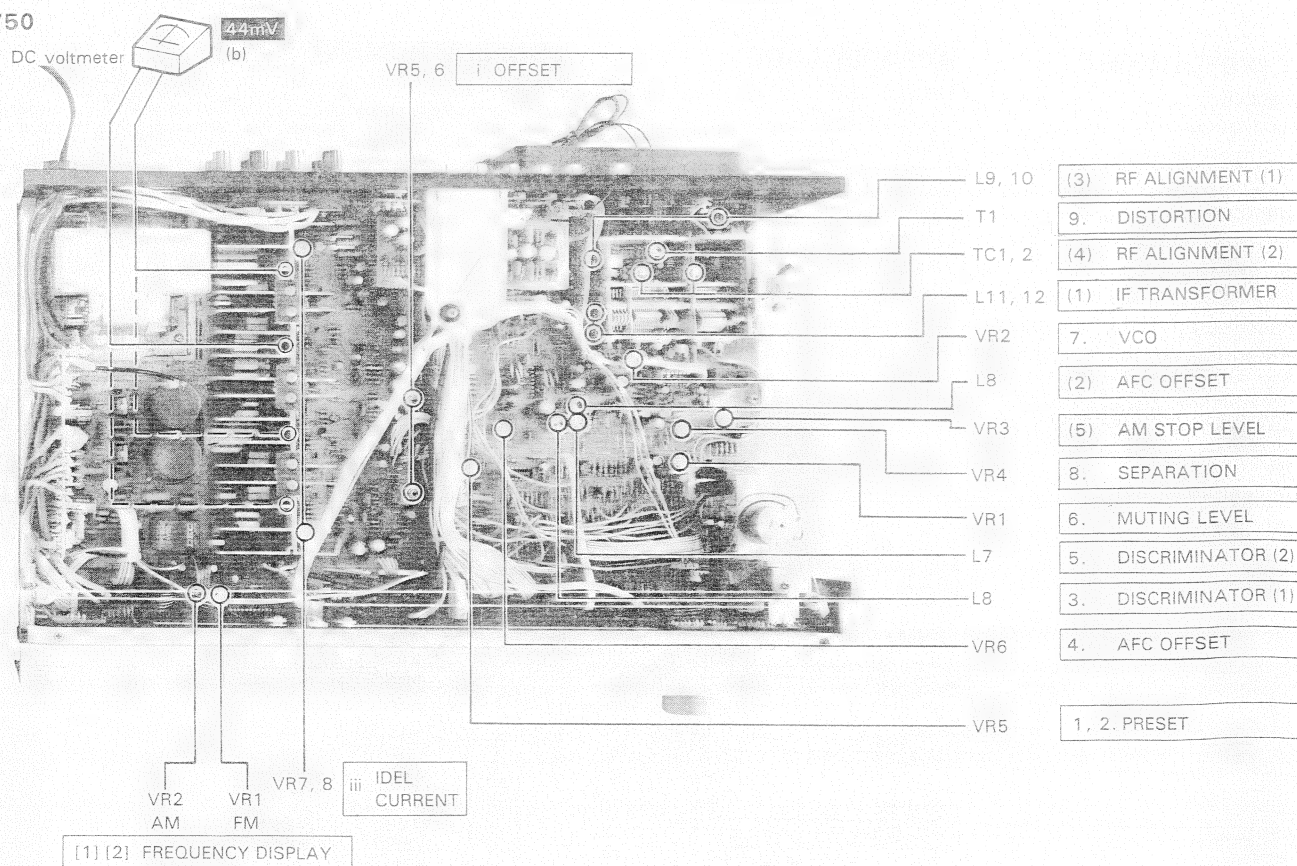


ADJUSTMENT / REGLAGES / ABGLEICH

KR730



KR750



ADJUSTMENT

NO.	ITEM	SYSTEM CONNECTIONS	TEST EQUIPMENT SETTING	TUNER (RECEIVER) SETTING	ALIGNMENT POINTS	ALIGN FOR	FIG.
FM SECTION							
1	PRESET VOLTAGE (1)	—	—	—	VR5	Set VR5 to its center.	
2	PRESET VOLTAGE (1)	Connect a DC voltmeter to the emitter of Q19 and the ground.	—	FM PRESET: ON PRESET marker: between stations in the FM band. Presetting reception.	VR5	10V	
3	DISCRIMINATOR (1)	Connect a DC voltmeter between TP A and TP B.	—	FM PRESET: ON PRESET marker: between stations in the FM band. Presetting reception.	L6	0V	
4	AFC OFFSET	Connect a DC voltmeter between TP C and the ground.	—	FM PRESET: ON PRESET marker: between stations in the FM band. Presetting reception.	VR6	0V	
AFC: automatic frequency control.							
5	DISCRIMINATOR (2)	(A) / (B)	98MHz 1kHz \pm 75kHz dev 60dB (ANT input)	FM 98MHz PRESET: OFF	L7	Minimum distortion	
6	MUTING LEVEL	(A) / (B)	98MHz 1kHz \pm 75kHz dev 6dB (ANT input)	FM (KR-730) FM NARROW (KR-750) 98MHz	VR1	Turn VR1 counterclockwise until the output waveform disappears. Then, turn VR1 clockwise until the output waveform appears again.	
Then, set the ANT input to 9dB. Check that the unit is tuned to the SG signal in both directions, that the dial pointer stops there, and that the signal is received.							
7	VCO	(A) / Connect a frequency counter to TP D via an AC voltmeter.	98MHz 0 dev 60dB (ANT input)	FM STEREO 98MHz	VR2	Frequency: 76kHz \pm 200Hz	
VCO: Voltage Controlled Oscillator							
8	SEPARATION	(C) / (B)	98MHz 1kHz \pm 68.25kHz dev Selector: L or R Pilot: \pm 6.75kHz dev 60dB (ANT input)	FM STEREO 98MHz	VR4	Minimum crosstalk. A compromise adjustment may be required if left-to-right and right-to-left separations are unequal.	
9	DISTORTION (STEREO)	(C) / (B)	98MHz 1kHz \pm 68.25kHz dev SELECTOR: L or R Pilot: \pm 6.75kHz dev 60dB (ANT input)	FM STEREO 98MHz	T1 (Front end)	Minimum distortion	
AM SECTION: Keep the AM loop antenna installed.							
(1)	IF TRANSFORMER	(D) / (B)	455kHz 400Hz, 30% mod 80dB (ANT input)	AM TUNING: between stations in the AM band.	L11, 12	Maximum amplitude and symmetry of the oscilloscope display.	
Before the alignment, turn the power off when the dial pointer is between stations in the AM band. Then, ground R182 of its opposite side of Q22. Turn the power on again and set out the alignment.							
(2)	AFC OFFSET (AM)	(D) / Connect a DC voltmeter between TP C and the ground.	455kHz 400Hz, 30% mod 80dB (ANT input)	AM TUNING: between stations in the AM band.	L8	0V	
Before the alignment, turn the power off when the dial pointer is between stations in the AM band. Then, ground R182 of its opposite side of Q22. Turn the power on again and set out the alignment.							
(3)	RF ALIGNMENT (AM)	(D) / (B)	600kHz 400Hz, 30% mod	AM auto tuning 600kHz	L9, 10	Maximum amplitude and symmetry of the oscilloscope display.	
(4)	RF ALIGNMENT (AM)	(D) / (B)	1400kHz 400Hz, 30% mod	AM auto tuning 1400kHz	TC1, 2 (Front end)	Maximum amplitude and symmetry of the oscilloscope display.	
Repeat alignments 1 and 2 several times.							
(5)	AM STOP LEVEL	(D) / (B)	1000kHz 400Hz 30% Mod 27dB (ANT input)	AM 1000kHz	VR3	Turn VR3 clockwise until the output waveform disappears. Then, turn VR3 counterclockwise until the output waveform appears.	
Then, set the ANT input to 30dB. Check that the unit is tuned to the SG signal in both directions, that the dial pointer stops there, and that the signal is received.							
FREQUENCY DISPLAY SECTION (KR-750)							
[1]	FREQUENCY DISPLAY (FM)	(A)	98.00MHz 0 dev 60dB (ANT input)	FM auto tuning 98MHz	VR1	Adjust VR1 so that the frequency display reads 98.00MHz when the dial pointer stops at the 98MHz of the dial scale.	
Readings when tuned to the 98.00MHz signal from the left and when tuned to the 98.00MHz signal from the right should be equal.							
[2]	FREQUENCY DISPLAY (AM)	(D)	1000kHz 0 mod 60dB (ANT input)	AM auto tuning 1000kHz	VR2	Adjust VR2 so that the frequency display reads 1000kHz when the dial pointer stops at the 1000kHz of the dial scale.	
Readings when tuned to the 1000kHz signal from the left and when tuned to the 1000kHz signal from the right should be equal.							
POWER AMP SECTION							
i	OFFSET	Connect a DC voltmeter to SPEAKERS A terminals.	—	SPEAKERS: A VOLUME: 0	VR 5 (L ch) VR 6 (R ch)	0V	

NO.	ITEM	SYSTEM CONNECTIONS	TEST EQUIPMENT SETTING	TUNER (RECEIVER) SETTING	ALIGNMENT POINTS	ALIGN FOR	FIG.
ii	IDLE CURRENT (KR-730)	Connect a DC voltmeter between TP 30 and TP 31 (TP 32 and TP 33).	—	VOLUME: 0	VR 7 (L ch) VR 8 (R ch)	14mV	(a)
iii	IDLE CURRENT (KR-750)	Connect a DC voltmeter between the heat sinks for Q15 and for Q17 (Q16 and Q18).	—	VOLUME: 0	VR7 (L ch) VR8 (R ch)	44mV	(b)
iv	LED INDICATOR (KR-730)	Connect an AG to TAPE A jack and a dummy load to SPEAKERS A terminals respectively. Connect an AC voltmeter across the dummy load.	AG: 1kHz and for a 6.3V reading of the AC voltmeter.	TAPE: A PLAY SPEAKERS: A VOLUME: 100	VR 9 (L ch) VR 10 (R ch)	5W	

REGLAGES

N°.	ITEM	RACCORDEMENTS DU SYSTEME	REGLAGE DE L'APPAREILLAGE	REGLAGE DU TUNER (AMPLI-TUNER)	POINT D'ALIGNEMENT	ALIGNER POUR	FIG.
SECTION MF							
1	TENSION DE PREREGLAG (1)	—	—	—	VR5	Régler VR5 dans la position centrale.	
2	TENSION DE PREREGLAG (2)	Connecter un voltmètre CC à l'émetteur de Q19 et à la terre.	—	FM PRESET: ON Curseur PRESET: entre les stations de la bande FM. Réception des stations préréglées.	VR5	10V	
3	DISCRIMINATEUR (1)	Connecter un voltmètre CC entre TP A et TP B.	—	FM PRESET: ON Curseur PRESET: entre les stations de la bande MF. Réception des stations préréglées.	L6	0V	
4	DECALAGE DE CAF	Connecter un voltmètre CC entre TP C et la terre.	—	FM PRESET: ON Curseur PRESET: entre les stations de la bande MF. Réception des stations préréglées.	VR6	0V	
CAF: contrôle automatique de fréquence.							
5	DISCRIMINATEUR (2)	(A) / (B)	98MHz 1kHz \pm 75kHz dév 60dB (Entrée ANT)	FM 98MHz PRESET: OFF	L7	Distortion minimale	
6	NIVEAU DU MUTING	(A) / (B)	98MHz 1kHz \pm 75kHz dév 6dB (Entrée ANT)	FM (KR-730) FM NARROW (KR-750) 98MHz	VR1	Tourner VR1 vers la gauche jusqu'à ce que la forme d'onde de sortie disparaisse. Puis tourner VR1 vers la droite jusqu'à ce que la forme d'onde de sortie réapparaisse à nouveau.	
Puis régler l'entrée ANT à 9dB. S'assurer que le signal SG est accordé dans les deux directions. L'aiguille du cadran s'arrête sur la position où le signal est reçu.							
7	OSCILLATEUR CONTROLE PAR LA TENSION	(A) / Connecter un compteur de fréquence à TP D par un voltmètre CA.	98MHz 0 dév 60dB (Entrée ANT)	FM STEREO accord manuel 98MHz	VR2	Fréquence: 76kHz \pm 200Hz	
8	SEPARATION	(C) / (B)	98MHz 1kHz \pm 68,25kHz dév Selection: L ou R Signal Pilot: \pm 6,75kHz dév 60dB (Entrée ANT)	FM STEREO 98MHz	VR4	Diaphonie minimale. Un compromis de réglage peut être nécessaire si les séparations de gauche à droite et de droite à gauche sont inégales.	
9	DISTORSION (STEREO)	(C) / (B)	98MHz 1kHz \pm 68,25kHz dév SELECTION: L ou R Signal pilote: \pm 6,75kHz dév 60dB (Entrée ANT)	FM STEREO 98MHz	T1 (Tête H.F.)	Distorsion minimale	
SECTION MA: Laisser l'antenne boucle MA installée.							
(1)	TRANSFORMATEUR F.I.	(D) / (B)	455kHz 400Hz, 30% mod 80dB (Entrée ANT)	AM ACCORD: entre stations de la bande MF.	L11, 12	Amplitude et symétrie maximale de l'affichage de l'oscilloscope.	
Avant d'aligner, arrêter l'appareil lorsque l'aiguille du cadran est entre deux stations AM. Mettre R182 du côté opposé de Q22. Remettre l'appareil en marche et régler l'alignement.							
(2)	DECALAGE DE C.A.F. (MA)	(D) / Connecter un voltmètre CC entre TP C et la terre.	455kHz 400Hz, 30% mod 80dB (Entrée ANT)	AM ACCORD: entre stations de la bande MF.	L8	0V	
Avant d'aligner, arrêter l'appareil lorsque l'aiguille du cadran est entre deux stations AM. Mettre R182 du côté opposé de Q22. Remettre l'appareil en marche et régler l'alignement.							

N°.	ITEM	RACCORDEMENTS DU SYSTEME	REGLAGE DE L'APPAREILLAGE	REGLAGE DU TUNER (AMPLI-TUNER)	POINT D'ALIGNEMENT	ALIGNER POUR	FIG.
(3)	ALIGNEMENT H.T. (MA)	(D) / (B)	600kHz 400Hz, 30% mod	AM accord automatique 600kHz	L9, 10	Amplitude et symétrie maximale de l'affichage de l'oscilloscope.	
(4)	ALIGNEMENT H.T. (MA)	(D) / (B)	1400kHz 400Hz, 30% mod	AM accord automatique 1400kHz	TC1, 2 Tête H.F.	Amplitude et symétrie maximale de l'affichage de l'oscilloscope.	
Répéter les points 1 et 2 plusieurs fois.							
(5)	MA NIVEAU D'ARRET	(D) / (B)	1000kHz 400Hz 30% mod 27dB (Entrée ANT)	AM 1000kHz	VR3	Tourner VR3 vers la droite jusqu'à ce que la forme d'onde de sortie disparaisse. Puis tourner VR3 vers la gauche jusqu'à ce que la forme d'onde de sortie réapparaisse à nouveau.	
Puis régler l'entrée ANT à 30dB. S'assurer que le signal SG est accordé dans les deux directions. L'aiguille du cadran s'arrête sur la position où le signal est reçu.							
SECTION AFFICHAGE FREQUENCE (KR-750)							
[1]	AFFICHAGE de la FREQUENCE (MF)	(A)	98,00MHz 0 dév 60dB (Entrée ANT)	FM accord automatique 98MHz	VR1	Régler VR1 de sorte que l'affichage de fréquence indique 98,00MHz lorsque l'aiguille du cadran s'arrête à 98MHz.	
En tournant à gauche ou à droite au signal 98MHz, la lecture doit être égale.							
[2]	AFFICHAGE de la FREQUENCE (MA)	(D)	1000kHz 0 mod 60dB (Entrée ANT)	AM accord automatique 1000kHz	VR2	Régler VR1 de sorte que l'affichage de fréquence indique 1000kHz lorsque l'aiguille du cadran s'arrête à 1000kHz.	
En tournant à gauche ou à droite au signal 1000kHz, la lecture doit être égale.							
SECTION AMPLIFICATEUR DE PUISSANCE							
i	DECALAGE (OFFSET)	Connecter un voltmètre CC aux bornes SPEAKERS A.	—	SPEAKERS: A VOLUME: 0	VR 5 (gauche) VR 6 (droit)	0V	
ii	COURANT DE POLARISATION (KR-730)	Connecter un voltmètre CC entre TP30 et TP31 (TP32 et TP33).	—	VOLUME: 0	VR7 (gauche) VR8 (droit)	14mV	(a)
iii	COURANT DE POLARISATION (KR-750)	Connecter un voltmètre CC entre les dissipateurs thermiques pour Q15 et pour Q17 (Q16 et Q18).	—	VOLUME: 0	VR7 (gauche) VR8 (droit)	44mV	(b)
iv	INDICATEUR LED (KR-730)	Connecter un générateur de signaux audio sur le jack TAPE A et une fausse charge (résistance) aux bornes SPEAKERS A. Connecter un voltmètre CA sur la fausse charge.	Générateur de signaux audio: 1kHz et 6.3V pour voltmètre CA.	TAPE: A PLAY SPEAKERS: A VOLUME: 100	VR 9 (gauche) VR 10 (droit)	5W	

ABGLEICH

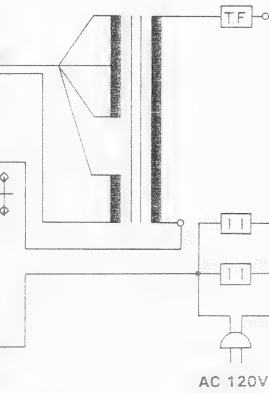
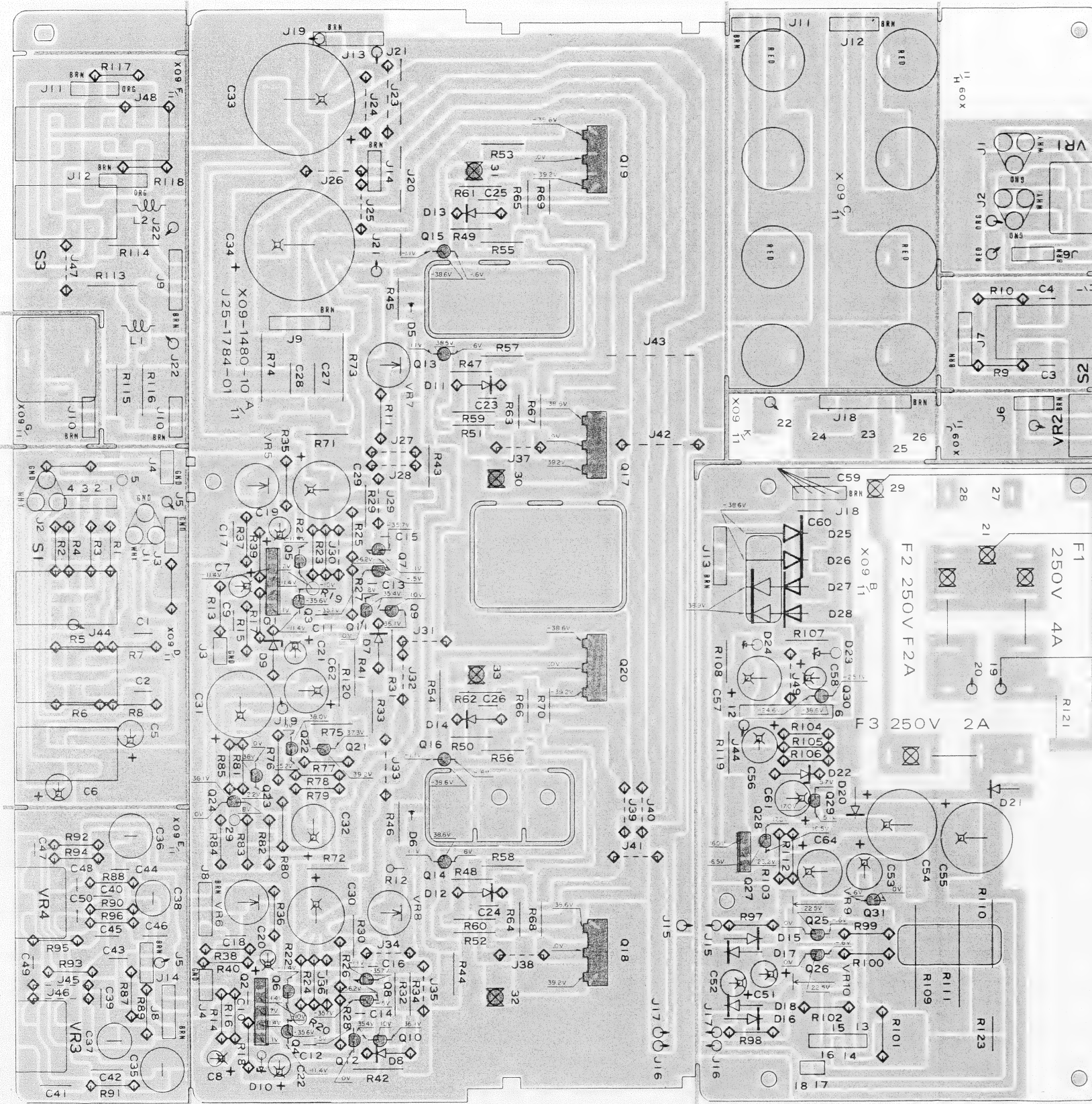
NR.	GEGENSTAND	SYSTEM-ANSCHLÜSSE	PRÜFEINRICHTUNG-EINSTELLUNG	TUNER (RECEIVER)-EINSTELLUNG	ABGLEICH-PUNKTE	ABGLEICHEN FÜR	ABB.
UKW-EMPFANGSABTEILUNG							
1	VOREINGESTELLTE SPANNUNG (1)	—	—	—	VR5	VR5 auf Mittelstellung einstellen.	
2	VOREINGESTELLTE SPANNUNG (2)	Einen Gleichspannungsmesser zum Emitter von Q19 und der Erde.	—	FM PRESET: ON Programmierschieber: zwischen Stationen im UKW-Bereich abstimmen. Empfang vorprogrammierter Sender.	VR5	10V	
3	DISKRIMINATOR (1)	Einen Gleichspannungsmesser zwischen TP A und TP B anschließen.	—	FM PRESET: ON Programmierschieber: zwischen Stationen im UKW-Bereich abstimmen. Empfang vorprogrammierter Sender.	L6	0V	
4	AUTOMATISCHE FREQUENZ-REGELUNG-VERSCHIEBUNG	Einen Gleichspannungsmesser zwischen TP C und der Erde anschließen.	—	FM PRESET: ON Programmierschieber: Zwischen Stationen im UKW-Bereich abstimmen. Empfang vorprogrammierter sender.	VR6	0V	
5	DISKRIMINATOR (2)	(A) / (B)	98MHz 1kHz ± 75kHz Hub 60dB (ANT-Eingang)	FM 98MHz PRESET: ON	L7	Minimale Klirrfaktor	

ABGLEICH

NR.	GEGENSTAND	SYSTEM-ANSCHLÜSSE	PRÜFEINRICHTUNG-EINSTELLUNG	TUNER (RECEIVER)-EINSTELLUNG	ABGLEICH-PUNKTE	ABGLEICHEN FÜR	ABB.
6	RAUSCHSPERRE-PEGEL	(A) / (B)	98MHz 1kHz \pm 75kHz Hub 6dB (ANT-Eingang)	FM (KR-730) FM NARROW (KR-750) 98MHz	VR1	VR1 entgegen dem Uhrzeigersinn drehen, bis die Ausgangswellenform verschwindet. Dann VR1 im Uhrzeigersinn drehen, bis die Ausgangswellenform wieder erscheint.	
Dann der ANT-Eingang auf 9dB einstellen. Nachprüfen, ob das Gerät auf das Signalgenerator-Signal in beiden Richtungen abgestimmt ist, ob der Skalenzeiger dort zum Stillstand kommt und ob das Signal empfangen wird.							
7	SPANNUNGS-GEREGELTER OSZILLATOR	(A) / Einen Frequenzmesser zu TP D über einem Wechselspannungsmesser anschließen.	98MHz 0 Hub 60dB (ANT-Eingang)	FM STEREO 98MHz	VR2	Frequenz: 76kHz \pm 200Hz	
8	STEREO KANAL TRENNUNG	(C) / (B)	98MHz 1kHz \pm 68,25kHz Hub Wähler: L oder R Piloton: \pm 6,75kHz Hub 60dB (ANT-Eingang)	FM STEREO 98MHz	VR4	Minimales Übersprechen. Eine Ausgleichregelung kann notwendig sein, falls links-zu-rechts und rechts-zu-links Trennungen ungleich sind.	
9	KLIRRFAKTOR (STEREO)	(C) / (B)	98MHz 1kHz \pm 68,25kHz Hub Wähler: L oder R Piloton: \pm 6,75kHz Hub 60dB (ANT-Eingang)	FM STEREO 98MHz	T1 (Frontende)	Minimaler Klirrfaktor	
MW-EMPFANGSABTEILUNG: Die MW-Rahmenantenne angebracht lassen.							
(1)	ZF-ÜBERTRAGER	(D) / (B)	455kHz 400Hz, 30% mod 80dB (ANT-Eingang)	AM ABSTIMMUNG: zwischen Stationen im UKW-Bereich abstimmen.	L11, 12	Maximale Amplitude und Symmetrie des Oszilloskopbildes.	
Vor der Abgleichung den Netzstrom abschalten, wenn die Skalennadel auf dem MW-Band zwischen zwei Sendern steht. Danach R182 an seiner Q22 gegenüberliegenden Seite erden. Netzstrom wieder einschalten und Abgleichung vornehmen.							
(2)	AUTOMATISCHE FREQUENZREGELUNG-VERSCHIEBUNG (MW)	(D) / Einen Gleichspannungsmesser zwischen TP C und der Erde anschließen	455kHz 400Hz, 30% mod 80dB (ANT-Eingang)	AM ABSTIMMUNG: zwischen Stationen im UKW-Bereich abstimmen.	L8	0V	
Vor der Abgleichung den Netzstrom abschalten, wenn die Skalennadel auf dem MW-Band zwischen zwei Sendern steht. Danach R182 an seiner Q22 gegenüberliegenden Seite erden. Netzstrom wieder einschalten und Abgleichung vornehmen.							
(3)	HF-ABGLEICH (MW)	(D) / (B)	600kHz 400Hz, 30% mod	AM automatische Abstimmung 600kHz	L9, 10	Maximale Amplitude und Symmetrie des Oszilloskopbildes.	
(4)	HF-ABGLEICH (MW)	(D) / (B)	1400kHz 400Hz, 30% mod	AM automatische Abstimmung 1400kHz	TC1, 2 Frontende	Maximale Amplitude und Symmetrie des Oszilloskopbildes.	
Abstimmungen 1 und 2 mehrere Male wiederholen.							
(5)	MW STOPPEGEL	(D) / (B)	1000kHz 400Hz 30% mod 27dB (ANT-Eingang)	AM 1000kHz	VR3	VR3 im Uhrzeigersinn drehen, bis die Ausgangswellenform verschwindet. Dann VR3 entgegen dem Uhrzeigersinn drehen, bis die Ausgangswellenform wieder erscheint.	
Dann der ANT-Eingang auf 30dB einstellen. Nachprüfen, ob das Gerät auf das Signalgenerator-Signal in beiden Richtungen abgestimmt ist, ob der Skalenzeiger dort zum Stillstand kommt und ob das Signal empfangen wird.							
FREQUENZANZEIGEABTEILUNG (KR-750)							
(1)	DIGITALFREQUENZ-ANZEIGE (UKW)	(A)	98,00MHz 0 Hub 60dB (ANT-Eingang)	FM automatische Abstimmung 98MHz	VR1	VR1 so justieren, daß die Frequenzanzeige 98,00 MHz anzeigt, wenn der Skalenzeiger auf der Position 98 MHz der Senderskala steht.	
Bei Abstimmung auf das 98MHz-Signal von links und bei Abstimmung auf das 98MHz-Signal von rechts, müssen die Anzeigewerte gleich sein.							
(2)	DIGITALFREQUENZ-ANZEIGE (MW)	(D)	1000kHz 0 mod 60dB (ANT-Eingang)	AM automatische Abstimmung 1000kHz	VR2	VR1 so justieren, daß die Frequenzanzeige 1000 kHz anzeigt, wenn der Skalenzeiger auf der Position 1000 kHz der Senderskala steht.	
Bei Abstimmung auf das 1000kHz-Signal von links und bei Abstimmung auf das 1000kHz-Signal von rechts, müssen die Anzeigewerte gleich sein.							
ENDVERSTÄRKERABTEILUNG							
i	VERSCHIEBUNG (OFFSET)	Einen Gleichspannungsmesser zu klemmen SPEAKERS A anschließen.	—	SPEAKERS: A VOLUME: 0	VR 5 (linken Kanal) VR 6 (rechter Kanal)	0V	
ii	LEERLAUF-STROM (KR-730)	Einen Gleichspannungsmesser zwischen TP30 und TP31 (TP32 und TP33).	—	VOLUME: 0	VR7 (linken kanal) VR8 (rechten kanal)	14mV	(a)
iii	LEERLAUF-STROM (KR-750)	Einen Gleichspannungsmesser zwischen der Kühlkörper für Q15 und für Q17 (Q16 und Q18).	—	VOLUME: 0	VR7 (linken kanal) VR8 (rechten kanal)	44mV	(b)
iv	LED INDIKATOR (KR-730)	Einen NF-Signalgenerator zu Buchse TAPE A und eine Belastungsnachbildung zu Klemmen SPEAKERS A anschließen. Einen Wechselspannungsmesser über die Belastungsnachbildung anschließen.	NF-Signalgenerator: 1kHz und für eine 6,3V-Ableseung vom Wechselspannungsmesser.	TAPE: A PLAY SPEAKERS: A VOLUME: 100	VR 9 (linken Kanal) VR 10 (rechten Kanal)	5W	

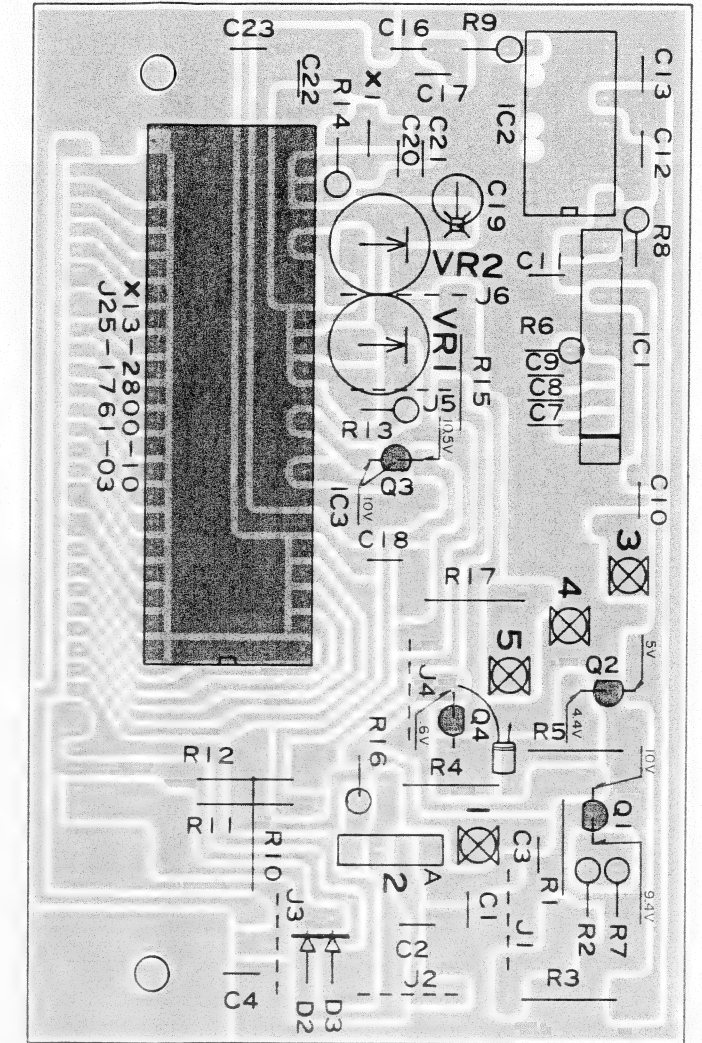
PC BOARD

KR-730
AUDIO (X09-148*-.**) Component Side View



- Q1,2 :2SA979(G,H)
Q3~6 :2SA1023(P,Q)
Q7,8 :2SC1845(1)
Q9,10 :2SA992(E,F)
Q11,12,23~26,28,29 :2SC945(Q,R) or 2SD767
Q13,14 :2SC2590(Q,R,S)
Q15,16,30 :2SA1110(Q,R,S)
Q17,18 :2SA1103(O,Y)
Q19,20 :2SC2578(O,Y)
Q21,22,31 :2SC2003
Q27 :2SD752
D5,6 :STV-4H
D7,8,11~14 :1S2076A
D9,10 :YZ-140
D15~18 :1N60
D20,21 :V06B
D22 :XZ-051
D23,24 :XZ-245
D25~28 :GP25D

KR-750
COUNTER (X13-2800-10) Component Side View



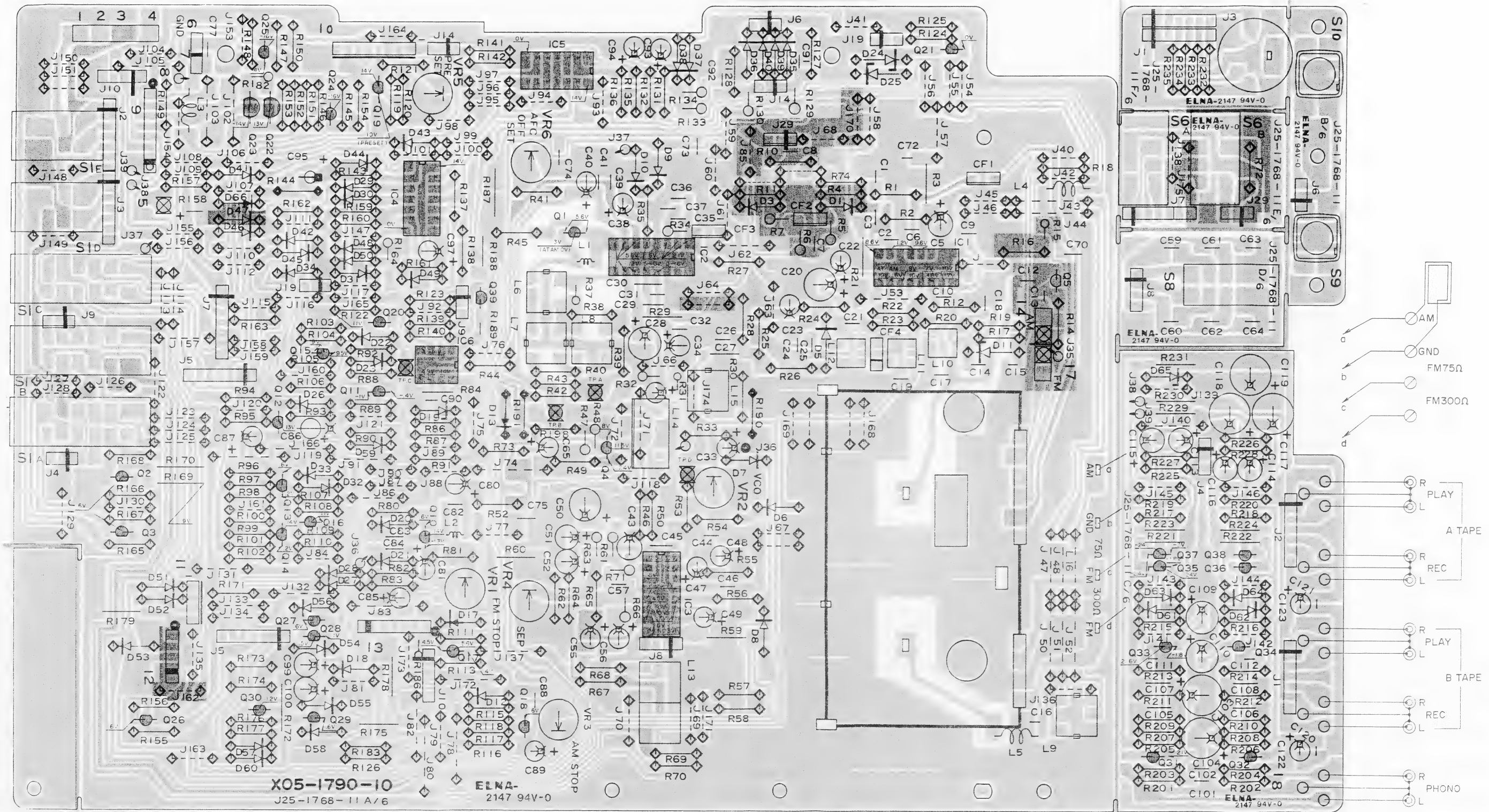
- Q1,2 :2SA733
Q3,4 :2SC945
IC1 :AN6821
IC2 :SN74LS90N
IC3 :LC7258
D2~4 :1S2076

* Refer to the schematic diagram for the values of resistors and capacitors.

PC BOARD

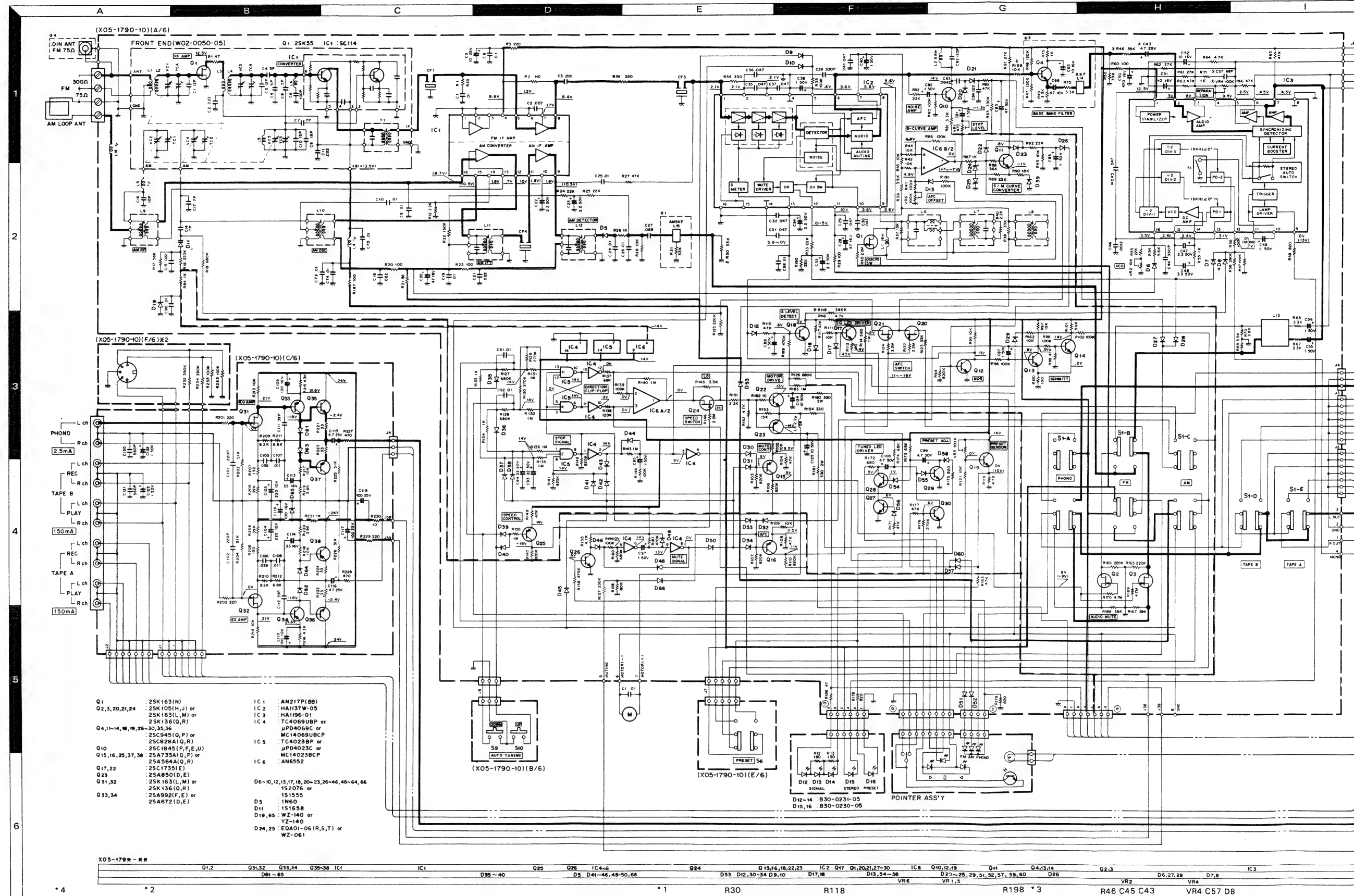
TUNER (X09-179*-**) Component Side View

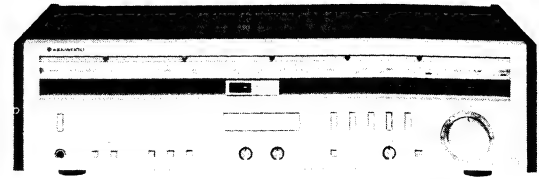
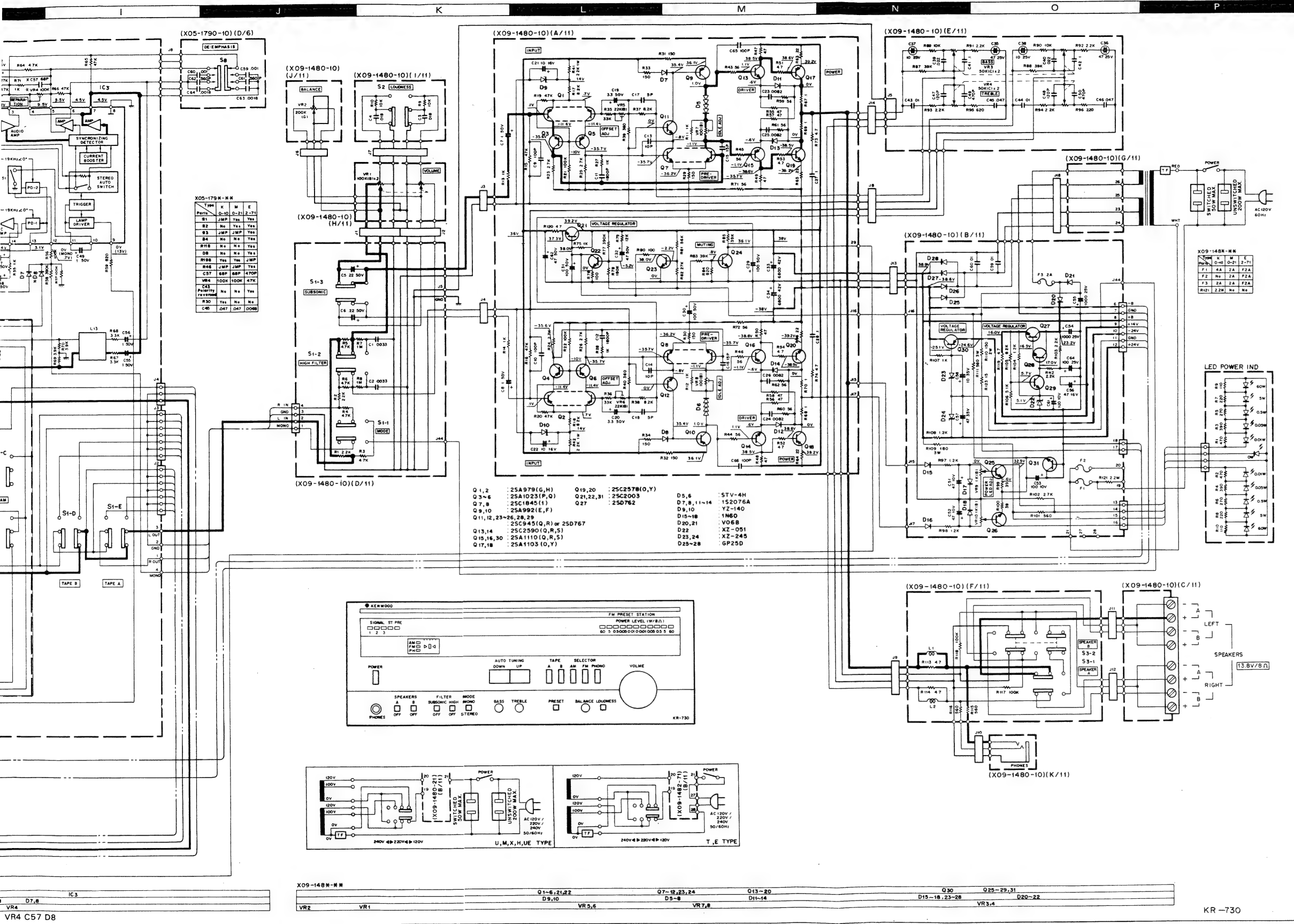
: Modifications for KR-750



Q1 :2SK163(N) Q2,3,20,21,24 :2SK105(H,J) or 2SK163(L,M) or 2SK136(Q,R)	Q10 :2SC1845(P,F,E,U) Q15,16,25,37,38 :2SA733A(Q,P) or 2SA564A(Q,R) Q17,22 :2SC1735(E) Q23 :2SA850(D,E)	Q31,32 :2SK163(L,M) or 2SK136(Q,R) Q33,34 :2SA992(F,E) or 2SA872(D,E)	IC3 :HA1196-01 IC4 :TC4069UBP or μPD4069C or MC14069UBCP IC5 :TC4023BP or μPD4023C or MC14023BCP IC6 :AN6552	D1~4,6~10,12,13,17,18,20~23,26~64,66 :1S2076 or 1S1555 D5 :1N60 D11 :1S1658 D19,65 :WZ-140 or YZ-140 D24,25 :EQA01-06(R,S,T) or WZ-061
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* Refer to the schematic diagram for the values of resistors and capacitors.





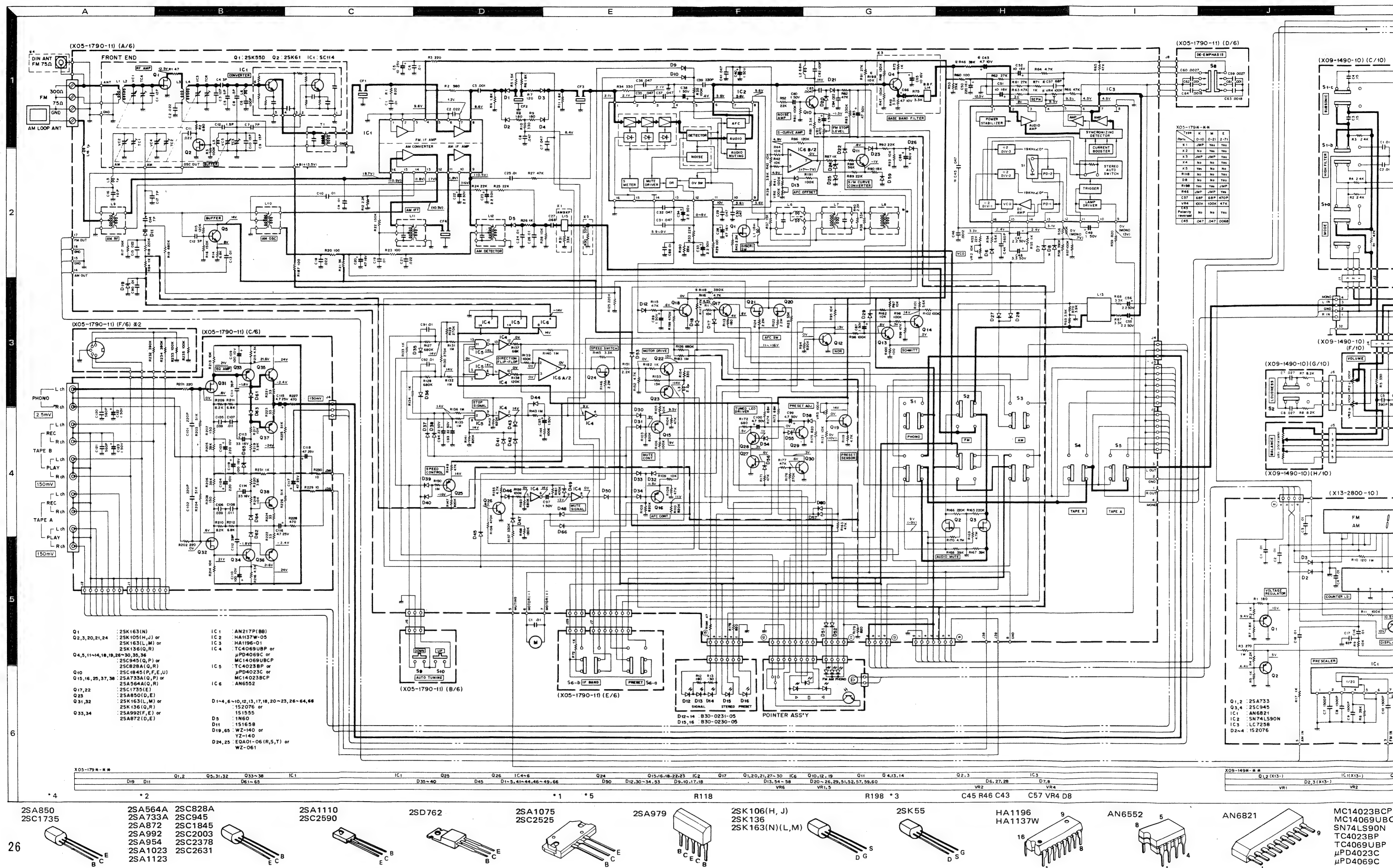
SPECIFICATIONS	
POWER AMPLIFIER SECTION	
Power Output	42 watts* per channel minimum RMS, both channels driven at 8 ohms from 20 Hz to 20,000 Hz with no more than 0.03% total harmonic distortion.
Total Harmonic Distortion (20 Hz to 20 kHz from TAPE)	0.03%
1 watt power into 8 ohms	0.008%
Intermodulation Distortion (60 Hz, 7 kHz = 4:1 SMPTE)	0.02%
Transient Response	1.5 μ s
Rise Time	± 50 V/ μ s
Slew Rate	50 at 1 kHz, 8 ohms
Damping Factor	2.5 mV/50 kohms
Input Sensitivity/Impedance	150 mV/50 kohms
PHONO	
Signal-to-Noise Ratio (A weighted)	80 dB for 2.5 mV input
PHONO	86 dB for 5.0 mV input
TAPE	105 dB for 150 mV input
TAPE	
Maximum PHONO Input Level at 1,000 Hz	220 mV (RMS), THD 0.03%
Frequency Response	20 Hz to 20,000 Hz ± 0.4 dB
PHONO RIAA Standard Curve	5 Hz to 250 kHz -3 dB
TAPE	
Tone Control	
Bass	± 8 dB at 100 Hz
Treble	± 8 dB at 10 kHz
Loudness Control (VOL. -30 dB)	$+10$ dB at 100 Hz
Subsonic Filter	18 Hz, 6 dB/oct
High Filter	5 kHz, 6 dB/oct
output Level/Impedance	150 mV/300 ohms
TAPE REC Out (Pin)	
FM TUNER SECTION	
Usable Sensitivity	10.3 dBf (1.8 μ V)
50 dB Quieting Sensitivity	
Mono	16.1 dBf (3.5 μ V)
Stereo	37.2 dBf (40 μ V)
Signal-to-Noise Ratio at 65 dBf	
Mono	76 dB
Stereo	72 dB
Total Harmonic Distortion at 1,000 Hz	
Mono	0.1%
Stereo	0.15%
Frequency Response	20 Hz to 15 kHz ± 0.5 dB
Capture Ratio	1.0 dB
Image Rejection Ratio	52 dB
Spurious Response Ratio	78 dB
IF Response Ratio	85 dB
Alternate Channel Selectivity	52 dB at 400 kHz
AM Suppression Ratio	50 dB
Stereo Separation Ratio	45 dB at 1,000 Hz
Subcarrier Product Ratio	35 dB at 50 Hz to 10 kHz
Antenna Impedance	48 dB
300 ohms balanced and 75 ohms unbalanced	
FM Frequency Range	88 MHz to 108 MHz
AM TUNER SECTION	
Usable Sensitivity	15 μ V
Signal-to-Noise Ratio	50 dB
Image Rejection	50 dB
Selectivity	30 dB
AUTO STOP SENSITIVITY	
FM	3 μ V
AM	22 μ V
GENERAL	
Power Consumption	210W (8 ohms at rated power)
AC Outlets	45W (No Signal)
Switched 1, Unswitched 1	
Dimensions	W 488 mm (19.7/32")
H 133 mm (5.1/4")	
D 350 mm (13.75/32")	
Weight (Net)	9.6 kg (21.2 lb)
(Gross)	11.0 kg (24.3 lb)

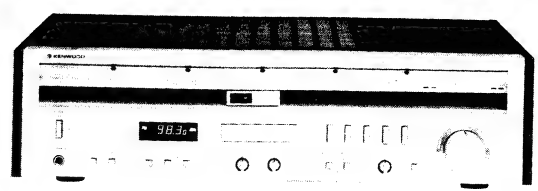
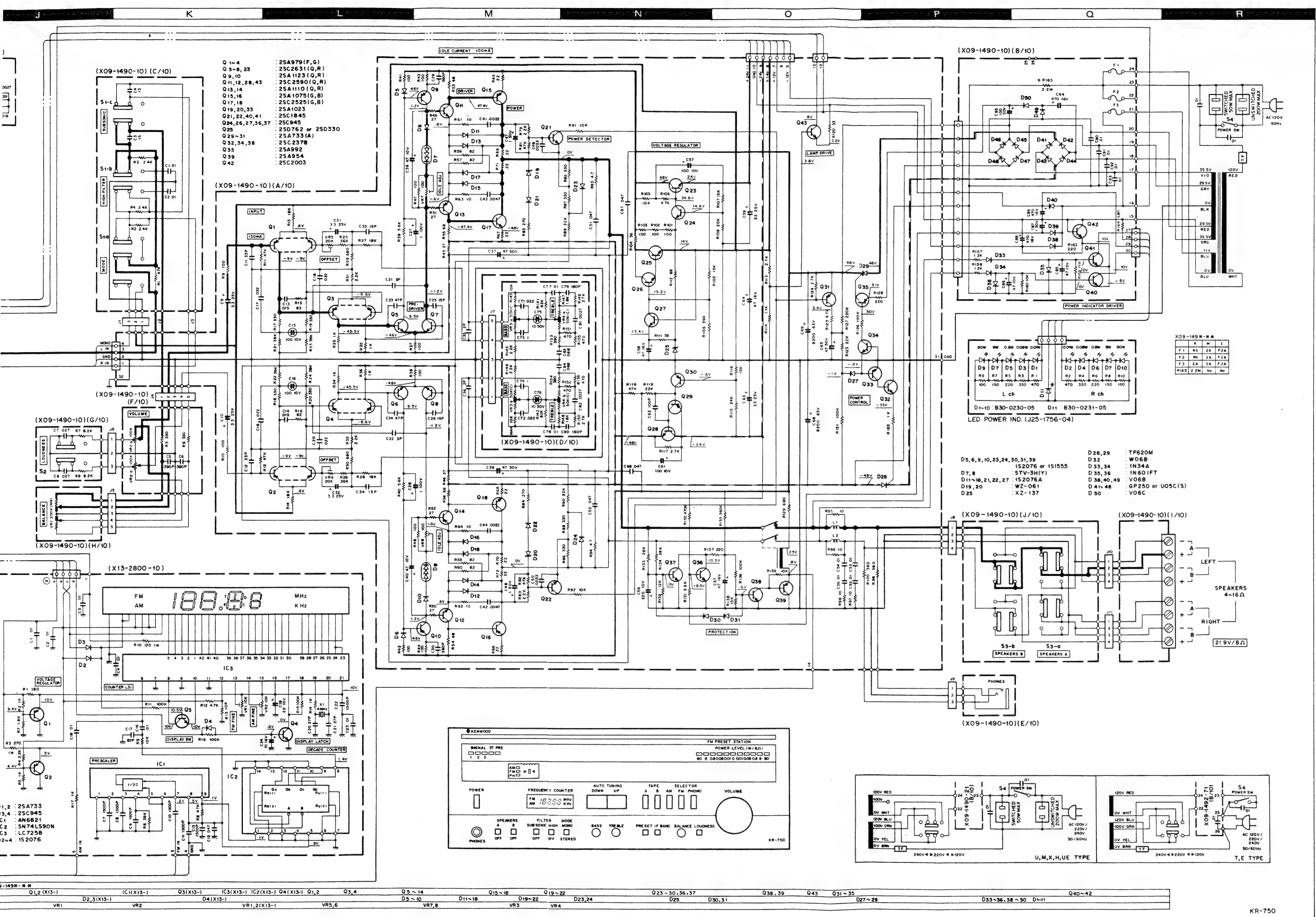
Kenwood follows a policy of continuous advancements in development. For this reason specifications may be changed without notice.

Kenwood poursuit une politique de progrès constants en ce qui concerne le développement. Pour cette raison, les spécifications sont sujettes à modifications sans préavis.

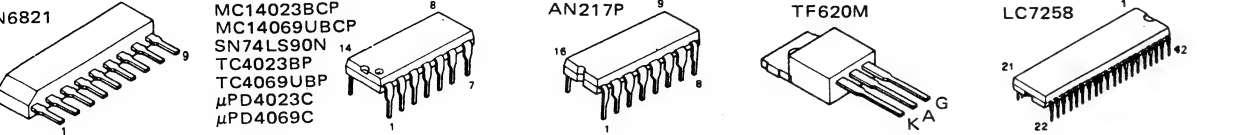
Kenwood strebt ständige Verbesserungen in der Entwicklung an. Daher bleiben Änderungen der technischen Daten jederzeit vorbehalten.

DC voltages are measured by a VOM with 20 k Ω /V input impedance other than the auto tuning section where DC voltmeter were used.





SPECIFICATIONS	
POWER AMPLIFIER SECTION	
Power Output	60 watts* per channel minimum RMS, both channels driven at 8 ohms from 20 Hz to 20,000 Hz with no more than 0.02% total harmonic distortion.
Total Harmonic Distortion (20 Hz to 20 kHz from TAPE)	0.02%
1 watt power into 8 ohms	0.005%
Intermodulation Distortion (60 Hz, 7 kHz = 4:1 SMPTE)	0.01%
rated power into 8 ohms	0.01%
Transient Response	
Rise Time	10 μ s
Slew Rate	± 120 V/ μ s
Damping Factor	60 at 1 kHz, 8 ohms
Input Sensitivity/Impedance	
PHONO	2.5 mV/50 kohms
TAPE	150 mV/50 kohms
Signal-to-Noise Ratio (A weighted)	
PHONO	85 dB for 2.5 mV input 91 dB for 5.0 mV input 105 dB for 150 mV input
TAPE	
Maximum PHONO Input Level at 1,000 Hz	230 mV (RMS), THD 0.02%
Frequency Response	20 Hz to 20,000 Hz ± 0.3 dB
PHONO RIAA Standard Curve	5 Hz to 300 kHz -3 dB
TAPE	
Tone Control	
Bass	± 10 dB at 100 Hz
Treble	± 10 dB at 10 kHz
Loudness Control (VOL -30 dB)	± 10 dB at 100 Hz
Subsonic Filter	18 Hz, 6 dB/oct
High Filter	5 kHz, 6 dB/oct
Output Level/Impedance	150 mV/300 ohms
TAPE REC Out (Pin)	
FM TUNER SECTION	
Usable Sensitivity	10.3 dBf (1.8 μ V)
50 dB Quieting Sensitivity	
Mono	16.1 dBf (3.5 μ V)
Stereo	37.2 dBf (40 μ V)
Signal-to-Noise Ratio at 65 dBf	
Mono	76 dB
Stereo	72 dB
Total Harmonic Distortion at 1,000 Hz (at wide band)	
Mono	0.1%
Stereo	0.15%
Frequency Response	20 Hz to 15 kHz
Capture Ratio	± 0.5 dB, -1.0 dB
Image Rejection Ratio	10 dB
Spurious Response Ratio	52 dB
IF Response Ratio	78 dB
Alternate Channel Selectivity	
WIDE	45 dB at 400 kHz
NARROW	65 dB at 400 kHz
AM Suppression Ratio	65 dB
Stereo Separation Ratio (at wide band)	
WIDE	45 dB at 1,000 Hz
NARROW	37 dB at 50 Hz to 10 kHz
Subcarrier Product Ratio	48 dB
Antenna Impedance	300 ohms balanced and 75 ohms unbalanced
FM Frequency Range	88 MHz to 108 MHz
AM TUNER SECTION	
Usable Sensitivity	15 μ V
Signal-to-Noise Ratio	50 dB
Image Rejection	50 dB
Selectivity	30 dB
AUTOMATIC SEQUENTIAL TUNING	
Threshold Sensitivity	30 μ V
FM Wide Band	3 μ V
FM Narrow Band	3 μ V
AM Band	22 μ V
GENERAL	
Power Consumption	2.8 A (UL and CSA) 300 W (8 ohms at rated power) 60 W (No Signal)
AC Outlets	Switched 1, Unswitched 1
Dimensions	W 488 mm (19-7/32") H 133 mm (5-1/4") D 350 mm (13-25/32")
Weight (Net)	9.6 kg (21.2 lb)
(Gross)	11.0 kg (24.3 lb)



DC voltages are measured by a VOM with 20 k Ω /V input impedance other than the auto tuning section where DC voltmeter was used.

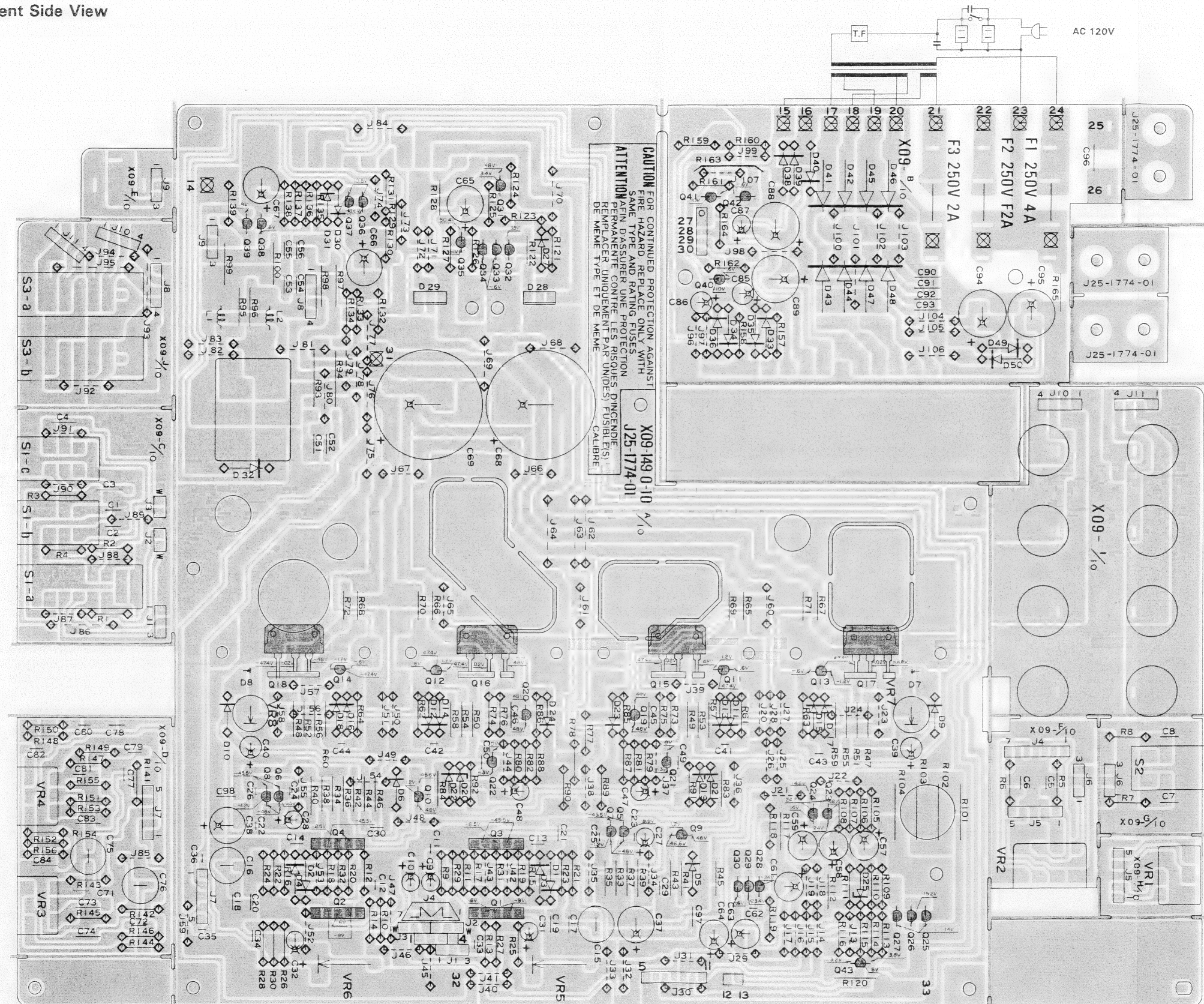
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PC BOARD

AUDIO (X09-149*-.) Component Side View**



* Refer to the schematic diagram for the values of resistors and capacitors.

PARTS LIST

INSTRUCTION FOR PARTS LIST

Ref. No. 参照番号	Parts No. 部品番号	Description 部品名/規格	Re- marks 備考
①	1 3A	MAIN CHASSIS ASS'Y	
②	2 2A	FRONT CHASSIS	
③	3 2A	FLUOR DISPLAY HOLDER	
④	4 1A, 1B	FRONT PANEL	
⑤	5 1A	FRONT PANEL ASS'Y	
⑥	PS3	PUSH SW.(SELECTOR) 111	
⑦	RS1	ROTARY SW.(FUNC.) 105	
⑧	RL1	RELAY Fig.104	

- ① Exploded view drawing No.
② Position in exploded view.
③ Symbol of new parts
④ Area to which parts are shipped. Example: A20-1390-13 is the part No. of FRONT PANEL ASS'Y for the "K" type products (for U.S.A.). When this column is blank, it means that the same type of parts (same parts No.) are used for the products shipped to all areas.
⑤ Reference No. in schematic diagram.
⑥ Abbreviation of "ceramic capacitor".
All capacitors and resistors are listed using abbreviations.
Abbreviations

* Abbreviations of capacitors (Parts No. with initial letter "C").

ELECTRO Electrolytic capacitor
LL-ELEC Low leak electrolytic capacitor
NP-ELEC Non-pole electrolytic capacitor
MICA Mica capacitor
POLYSTY Polystyrene capacitor
MYLAR Mylar capacitor
CERAMIC Ceramic capacitor
TANTAL Tantalum capacitor
MF Metallized film capacitor
MP Metallized paper capacitor
OIL Oil capacitor
The unit "UF" is used in lieu of "μF".

* Abbreviations of resistors (Parts No. with initial letters "R").

RC Carbon composition resistor
RD Carbon film resistor
FL-PROOF RD Flame-proof carbon film resistor
RW Wire wound power resistor
FL-PROOF RS Flame-proof metal oxide film resistor
RN Metal film resistor
FUSE-RESIST Resistor with fuse function
2B Rated wattage 1/8W
2E Rated wattage 1/4W
2H Rated wattage 1/2W
3A Rated wattage 1W
3D Rated wattage 2W
3F Rated wattage 3W
3G Rated wattage 4W
3H Rated wattage 5W
All resistor values are indicated with the unit (Ω) omitted.

* Abbreviations common to capacitors and resistors.

C ±0.25pF (Used for capacitors only)
D ±0.5pF (Used for capacitors only)
F ±1%
G ±2%
J ±5%
K ±10%
M ±20%
Z +80%, -20% (Used for capacitors only)
P +100%, -0% (Used for capacitors only)
Resistors RD (carbon composition resistors) are not listed in the parts list. For values, refer to the schematic diagram.

* CODE's in
X05-179*-** X09-148*-** X09-149*-**

KR-730
K:X05-1790-10 K:X09-1480-10 K:X09-1490-10
M:X05-1790-21 P:X09-1481-01 M:X09-1490-21

E:X05-1792-71 M:X09-1480-21 E:X09-1492-71

KR-750 E:X09-1482-71

K:X05-1790-11

M:X05-1790-22

E:X05-1792-72

Ref. No. 参照番号	Parts No. 部品番号	Description 部品名/規格	Re- marks 備考
KR-730 UNIT			
1 1A	-	METALLIC FRAME	
2 1B	-	REAR PANEL	
3 1A	-	BOTTOM PLATE	
4 3A	-	ESCUTCHEON (VOLUME)	
5 3A	-	ESCUTCHEON (TUNING)	
6 3A	-	DRESS PLATE	
7 3A, 3B	-	HOLDER (DIAL CALIB)	
8 3A	-	RAIL	
10 1A	A01-0382-03	METALLIC CABINET	*K
11 3A	A20-1651-03	FRONT PANEL ASSY	PU
11 3A	A20-1651-03	FRONT PANEL ASSY	MH
11 3A	A20-1651-03	FRONT PANEL ASSY	XE
11 3A	A20-1651-03	FRONT PANEL ASSY	UE
11 3A	A20-1651-03	FRONT PANEL ASSY	*T
11 3A	A20-1652-03	FRONT PANEL ASSY	
12 2A	A50-0080-03	SIDE PLATE (L)	*
13 3B	A50-0081-03	SIDE PLATE (R)	*
-	B46-0055-20	WARRANTY CARD	P
-	B46-0060-00	WARRANTY CARD	T
-	B46-0061-20	WARRANTY CARD	K
-	B46-0062-20	WARRANTY CARD	UH
-	B46-0062-20	WARRANTY CARD	UE
-	B46-0063-13	WARRANTY CARD	UH
-	B46-0063-13	WARRANTY CARD	UE
-	B46-0064-10	WARRANTY CARD	X
-	B50-3174-00	INSTRUCTION MANUAL	*P
-	B50-3174-00	INSTRUCTION MANUAL	UM
-	B50-3174-00	INSTRUCTION MANUAL	HX
-	B50-3174-00	INSTRUCTION MANUAL	UE
-	B50-3175-00	INSTRUCTION MANUAL	*P
-	B50-3175-00	INSTRUCTION MANUAL	MX
-	B50-3176-00	INSTRUCTION MANUAL	*T
-	B50-3177-00	INSTRUCTION MANUAL	*E
-	B59-0018-00	SERVICE STATIONS' LIST	UH
-	B59-0018-00	SERVICE STATIONS' LIST	UE
15 3A	B10-0272-04	FRONT GLASS	*
16 3A	B20-0469-02	DIAL CALIBRATIONS	*
17 3A	B21-0044-05	DIAL POINTER ASSY	*
18 2A, 3B	B30-0230-05	LED (RED: ST, PRESET, PWR)	
19 2A, 3B	B30-0231-05	LED (GREEN: SIG, ZERO PWR)	
C1	C55-1710-38	CERAMIC 0.01UF Z	
20 1B	D15-0164-04	DIAL PULLEY	
21 3A, 3B	D15-0172-04	PULLEY	UM
22 1B	D32-0082-04	STOPPER (SWITCH)	HX
22 1B	D32-0082-04	STOPPER (SWITCH)	TE
22 1B	D32-0082-04	STOPPER (SWITCH)	UE
23 1B	E03-0017-05	AC OUTLET	KP
23 1B	E03-0031-05	AC OUTLET	UM
23 1B	E03-0031-05	AC OUTLET	HX
23 1B	E03-0031-05	AC OUTLET	UE
24 1B	E04-0004-05	FM RECEPTACLE	TE
25 1B	E30-0181-05	POWER CORD	KP
25 1B	E30-0459-05	POWER CORD	E
25 1B	E30-0545-05	POWER CORD	UM
25 1B	E30-0545-05	POWER CORD	H
25 1B	E30-0545-05	POWER CORD	UE
25 1B	E30-0587-05	POWER CORD	T

PARTS LIST

Ref. No. 参照番号	Parts No. 部品番号	Description 部品名/規格	Re- marks 備考
25 1B	E30-0649-05	POWER CORD	X
26 2B	G01-0045-24	COIL SPRING	
-	H01-3185-04	CARTON BOX	*K
-	H01-3185-04	CARTON BOX	UM
-	H01-3185-04	CARTON BOX	HX
-	H01-3185-04	CARTON BOX	UE
-	H01-3185-04	CARTON BOX	*E
-	H10-1556-02	POLYSTYRENE FIXTURE	
-	H20-0416-04	COVER	M
-	H20-0454-04	COVER	KP
-	H20-0454-04	COVER	UH
-	H20-0454-04	COVER	XT
-	H20-0454-04	COVER	E
-	H25-0076-04	BAG 235X315	UE
-	H25-0076-04	BAG 235X315	UH
-	H25-0076-04	BAG 235X315	UE
27 1A	J02-0103-05	FOOT X4	
28 1A	J19-0564-05	HOLDER (ANTENNA)	*
29 3B	J19-0565-03	LED HOLDER (POWER IND)	*
30 2A	J19-0566-04	LED HOLDER (SIG, ST, PSET)	KP
31 1B	J41-0034-05	BUSHING (POWER CORD)	UM
31 1B	J42-0084-05	BUSHING (POWER CORD)	HT
31 1B	J42-0084-05	BUSHING (POWER CORD)	E
31 1B	J42-0084-05	BUSHING (POWER CORD)	UE
31 1B	J42-0085-05	BUSHING (POWER CORD)	X
32 3A, 3B	K27-0130-04	KNOB (PWR, TAPE, SELECTOR)	*
33 3A, 3B	K27-0131-04	KNOB (SP, FILTER, MODE)	*
33 3A, 3B	K27-0131-04	KNOB (PRESET, LOUDNESS)	*
34 3A	K29-0336-04	KNOB (AUTO TUNING)	*
35 3A	K29-0337-04	KNOB (VOLUME)	*
36 3A	K29-0339-04	PRESET MARKER	*
37 3A, 3B	K29-0346-04	KNOB (BASS, TREBLE)	
37 3A, 3B	K29-0348-04	KNOB (BALANCE)	
38 1A	L01-2101-05	POWER TRANSFORMER	*K
38 1A	L01-2106-05	POWER TRANSFORMER	*T
38 1A	L01-2106-05	POWER TRANSFORMER	E
38 1A	L01-2107-05	POWER TRANSFORMER	*P
38 1A	L01-2108-05	POWER TRANSFORMER	*U
38 1A	L01-2108-05	POWER TRANSFORMER	MH
38 1A	L01-2108-05	POWER TRANSFORMER	X
38 1A	L01-2108-05	POWER TRANSFORMER	UE
39 1B	N08-0128-35	GND TERMINAL	
40 1B	N09-0100-14	SCREW	
41 2B	N09-0287-05	SCREW (M3X8; MOTOR ASSY)	
42 3A, 3B	N09-0293-05	SCREW (M2.6X14; PULLEY)	
43 1B	N09-0303-05	SCREW (M3X6; DIN CONN)	UM
43 1B	N09-0303-05	SCREW (M3X6; DIN CONN)	HX
43 1B	N09-0303-05	SCREW (M3X6; DIN CONN)	TE
44 2A, 3B	N09-0308-05	SCREW (M4X12; SIDE PLATE)	UE
45 1B	N09-0362-05	SCREW (M2.6X16)	
46 2A, 3B	N29-0035-05	RIVET	
47 1B	S31-2046-05	SLIDE SW (VOLTAGE SEL)	UM
47 1B	S31-2046-05	SLIDE SW (VOLTAGE SEL)	HX
47 1B	S31-2046-05	SLIDE SW (VOLTAGE SEL)	TE
47 1B	S31-2046-05	SLIDE SW (VOLTAGE SEL)	UE
-	T90-0202-05	FM INDOOR ANTENNA	*
48 2B	T49-0013-03	MOTOR ASSY	
49 1A, 1B	T90-U104-05	AN LOOP ANTENNA	
50 1B, 3B	X05-1790-10	TUNER PCB ASSY	*K
50 1B, 3B	X05-1790-10	TUNER PCB ASSY	*U
50 1B, 3B	X05-1790-21	TUNER PCB ASSY	MH
50 1B, 3B	X05-1790-21	TUNER PCB ASSY	X
50 1B, 3B	X05-1790-21	TUNER PCB ASSY	UE
50 1B, 3B	X05-1790-21	TUNER PCB ASSY	*T
50 1B, 3B	X05-1792-71	TUNER PCB ASSY	E
50 1B, 3B	X05-1792-71	TUNER PCB ASSY	*K
51 1B, 2A	X09-1480-10	AUDIO AMP PCB ASSY	*U
51 1B, 2A	X09-1480-21	AUDIO AMP PCB ASSY	
51 1B, 2A	X09-1480-21	AUDIO AMP PCB ASSY	MH
51 1B, 2A	X09-1480-21	AUDIO AMP PCB ASSY	X
51 1B, 2A	X09-1480-21	AUDIO AMP PCB ASSY	UE
51 1B, 2A	X09-1481-01	AUDIO AMP PCB ASSY	*P
51 1B, 2A	X09-1482-71	AUDIO AMP PCB ASSY	*T
51 1B, 2A	X09-1482-71	AUDIO AMP PCB ASSY	E
TUNER (X05-179*-**)			
101 1B	-	MOUNTING HARDWARE	
C1	C55-1710-38	CERAMIC 0.01UF Z	
C2	C55-1722-38	CERAMIC 0.022UF Z	
C3	C52-1710-26	CERAMIC 0.001UF K	
C5	C24-1410-61	ELECTRO 10UF 25wV	
C6	C55-1710-38	CERAMIC 0.01UF Z	
C7 , 8	C55-1747-38	CERAMIC 0.047UF Z	750
C9 , 10	C55-1710-38	CERAMIC 0.01UF Z	
C12	C71-1703-01	CERAMIC 3PF C	750
C13	C55-1710-38	CERAMIC 0.01UF Z	750
C14	C63-1707-02	CERAMIC 7PF D	
C15	C55-1722-38	CERAMIC 0.022UF Z	
C16	C71-1710-02	CERAMIC 10PF D	
C17	C63-1707-02	CERAMIC 7PF D	
C18	C55-1722-38	CERAMIC 0.022UF Z	
C19	C55-1710-38	CERAMIC 0.01UF Z	
C20	C24-1247-61	ELECTRO 47UF 16wV	
C21	C55-1722-38	CERAMIC 0.022UF Z	
C22 , 23	C24-1722-51	ELECTRO 2.2UF 50wV	
C24 -26	C55-1710-38	CERAMIC 0.01UF Z	
C27	C46-1768-36	MYLAR 0.068UF K	
C28	C24-1247-61	ELECTRO 47UF 16wV	
C29 -32	C55-1747-38	CERAMIC 0.047UF Z	
C33 , 34	C24-1722-51	ELECTRO 2.2UF 50wV	
C35 -37	C55-1747-38	CERAMIC 0.047UF Z	
C38	C24-1710-51	ELECTRO 1UF 50wV	
C39	C71-1733-16	CERAMIC 330PF K	
C40	C24-1710-51	ELECTRO 1UF 50wV	
C41	C55-1747-38	CERAMIC 0.047UF Z	
C43	C24-1447-51	ELECTRO 4.7UF 25wV	
C44	C48-1736-15	POLYSTY 360PF J	
C45	C46-1747-35	MYLAR 0.047UF J	KM
C45	C46-1768-25	MYLAR 0.0068UF K	E
C46	C52-1712-26	CERAMIC 0.0012UF K	
C47	C24-1722-51	ELECTRO 2.2UF 50wV	
C48	C24-1733-51	ELECTRO 3.3UF 50wV	
C49	C25-1710-57	LL-ELEC 1UF 50wV	
C50	C24-1222-71	LL-ELEC 220UF 16wV	750
C50	C24-1247-71	ELECTRO 470UF 16wV	
C51 , 52	C24-1210-61	ELECTRO 10UF 16wV	
C55 , 56	C24-1710-51	ELECTRO 1UF 50wV	
C55 , 56	C24-1722-51	LL-ELEC 2.2UF 50wV	750

PARTS LIST

Ref. No. 参照番号	Parts No. 部品番号	Description 部品名/規格	Re- marks 備考	Ref. No. 参照番号	Parts No. 部品番号	Description 部品名/規格	Re- marks 備考
C57	C52-1747-16	CERAMIC 470PF K	E	L13	L79-0072-05	FILTER	E
C57	C71-1768-06	CERAMIC 68PF K	KM	L14	L79-0109-05	FILTER	ME
C59 ,60	C46-1710-25	MYLAR 0.001UF J		L15	L79-0073-05	FILTER	
C61 ,62	C47-1756-15	POLYSTY 560PF J		L16	L40-1092-11	INDUCTOR	
C63 ,64	C46-1718-25	MYLAR 0.0018UF J		R3	R43-1222-15	FL-PROOF RD220 J 2E	
C65	C24-1210-61	ELECTRO 10UF 16WV	E	R21	R43-1256-05	FL-PROOF RD56 J 2E	
C66	C24-1447-51	ELECTRO 4.7UF 25WV	E	R29	R43-1210-15	FL-PROOF RD100 J 2E	
C70	C55-1710-38	CERAMIC 0.01UF Z		R60	R43-1210-15	FL-PROOF RD100 J 2E	
C73 ,74	C55-1710-38	CERAMIC 0.01UF Z		R114	R47-5468-15	FL-PROOF RS680 J 3A	
C80 ,81	C24-1710-51	ELECTRO 1UF 50WV		R169,170	R41-5347-55	FL-PROOF RD4.7M J 2H	
C82	C47-1712-15	POLYSTY 120PF J		R180	R47-5533-15	FL-PROOF RS330 J 3D	
C83	C46-1747-25	MYLAR 0.0047UF J		R181	R47-5512-15	FL-PROOF RS120 J 3D	
C84	C46-1722-35	MYLAR 0.022UF J		R186	R43-5247-05	FL-PROOF RD47 J 2E	
C85	C24-1747-41	ELECTRO 0.47UF 50WV		R187	R43-1210-15	FL-PROOF RD100 J 2E	
C86	C24-1710-51	ELECTRO 1UF 50WV		R221-224	R43-1233-05	FL-PROOF RD33 J 2E	
C87	C25-1710-47	LL-ELEC 0.1UF 50WV		R229,230	R43-1210-05	FL-PROOF RD10 J 2E	
C88	C55-1710-38	CERAMIC 0.01UF Z		R229	R43-1222-15	FL-PROOF RD220 J 2E	
C89	C24-1710-51	ELECTRO 1UF 50WV		R231	R43-1210-25	FL-PROOF RD1K J 2E	
C90	C55-1710-38	CERAMIC 0.01UF Z		VR1	R12-0065-05	TRIMMING POT. 470	
C91 ,92	C46-1710-35	MYLAR 0.01UF J		VR2	R12-3045-05	TRIMMING POT. 10K	
C93 ,94	C25-1722-47	LL-ELEC 0.22UF 50WV		VR3	R12-8009-05	TRIMMING POT. 1M	
C95	C24-1710-51	ELECTRO 1UF 50WV		VR4	R12-3046-05	TRIMMING POT. 47K	
C97	C24-1710-51	ELECTRO 1UF 50WV		VR4	R12-5030-05	TRIMMING POT. 100K	
C99 ,100	C24-1747-51	ELECTRO 4.7UF 50WV		VR5 ,6	R12-5030-05	TRIMMING POT. 100K	
C101,102	C71-1722-15	CERAMIC 220PF J		S1	S42-5019-05	PUSH SW (SELECTOR)	*
C103,104	C24-1022-71	ELECTRO 220UF 10WV		S6	S40-2117-05	PUSH SW (PRESET)	
C105,106	C46-1739-35	MYLAR 0.039UF J		S6	S42-2036-05	PUSH SW (PSET,IF-BAND)	
C107,108	C49-2011-34	POLYSTY 0.01UF G		S8	S31-2048-05	SLIDE SW (DE-EMPHASIS)	
C109,110	C24-1010-71	ELECTRO 100UF 10WV		S9 ,10	S40-1012-05	PUSH SW (AUTO TUNING)	
C111,112	C71-1739-06	CERAMIC 39PF K		D1	V11-0271-05	1S2076	750
C113,114	C24-1233-61	ELECTRO 33UF 16WV		D5	V11-0051-05	1N60	
C115,116	C25-1447-57	LL-ELEC 4.7UF 25WV		D6 ,7	V11-0271-05	1S2076	
C117,118	C24-1410-71	ELECTRO 100UF 25WV		D8	V11-0271-05	1S2076	
C117,118	C24-1447-61	ELECTRO 47UF 25WV	750	D9 ,10	V11-0271-05	1S2076	
C119	C24-1210-71	ELECTRO 100UF 16WV		D11	V11-0192-05	1S1658	
C120,121	C52-1756-16	CERAMIC 560PF K		D12 ,13	V11-0271-05	1S2076	
C122,123	C24-1710-51	ELECTRO 1UF 50WV		D17 ,18	V11-0271-05	1S2076	
C124,125	C24-1710-61	ELECTRO 10UF 50WV		D19	V11-0344-05	WZ-140	
C126	C55-1710-38	CERAMIC 0.01UF Z	750	D20 -23	V11-0271-05	1S2076	
-	E40-0473-05	PIN CONNECTOR (4P)		D24 ,25	V11-0431-05	EQA01-06	
-	E40-0873-05	PIN CONNECTOR (8P)		D26 -46	V11-0271-05	1S2076	750
102 1B	E06-0513-05	DIN CONNECTOR	ME	D47	V11-0271-05	1S2076	
103 1B	E13-0423-05	PHONO JACK (4P)		D48 -64	V11-0271-05	1S2076	
104 1B	E13-0612-05	PHONO JACK (6P)		D65	V11-0344-05	WZ-140	
105 1B	E20-0439-05	ANTENNA TERMINAL BOARD		D66	V11-0271-05	1S2076	
CF1 ,3	L72-0121-05	CERAMIC FILTER	KM	IC1	V30-0270-20	AN217P(BB)	
CF1 ,4	L79-0131-05	CERAMIC FILTER SET	750	IC2	V30-0192-05	HA1137W-05	
CF1 ,3	L79-0135-05	CERAMIC FILTER SET	E	IC3	V30-0193-05	HA1196-01	
CF4	L72-0069-05	CERAMIC FILTER		IC4	V30-0297-20	TC4069UBP	
L1	L40-1835-21	INDUCTOR		IC5	V30-0301-60	TC4023BP	
L2	L40-6825-21	INDUCTOR		IC6	V30-0405-10	AN6552	
L3	L40-2292-11	INDUCTOR		Q1	V09-0144-40	2SK163(N)	
L4	L40-1092-11	INDUCTOR		Q2 ,3	V09-0127-40	2SK105(H,J)	
L5	L40-1092-11	INDUCTOR		Q4	V03-0348-05	2SC945(Q,P)	
L6	L30-0316-05	FM-IFT		Q10	V03-1845-00	2SC1845	
L7	L30-0317-05	FM-IFT		Q11 -14	V03-0348-05	2SC945(Q,P)	
L8	L30-0338-05	IFT		Q15 ,16	V01-0733-40	2SA733(A)(Q,P)	
L9	L31-0460-05	AM-RF COIL		Q17	V03-1735-10	2SC1735(E)	
L10	L32-0186-05	AM-OSCILLATOR COIL		Q18 ,19	V03-0348-05	2SC945(Q,P)	
L11	L30-0307-05	AM-IFT		Q20 ,21	V09-0127-40	2SK105(H,J)	
L12	L30-0283-05	AM-IFT		Q22	V03-1735-10	2SC1735(E)	
				Q23	V01-0173-05	2SA850	

PARTS LIST

Ref. No. 参照番号	Parts No. 部品番号	Description 部品名/規格	Re- marks 備考	Ref. No. 参照番号	Parts No. 部品番号	Description 部品名/規格	Re- marks 備考
Q24	V09-0127-40	2SK105(H,J)		L1 ,2	L39-0085-05	COIL	
Q25	V01-0733-40	2SA733(A)(Q,P)		208 2A	N09-0287-05	SCREW (M3X8)	
Q26 -30	V03-0348-05	2SC945(Q,P)		209 2A	N09-0321-05	SCREW (M3X10)	
Q31 ,32	V09-0144-60	2SK163(L,M)		R29 -34	R43-1215-15	FL-PROOF RD150 J 2E	
Q33 ,34	V01-0992-10	2SA992(F,E)		R41 ,42	R47-5422-25	FL-PROOF RS2.2K J 3A	
Q35 ,36	V03-0348-05	2SC945(Q,P)		R43 -46	R43-1256-05	FL-PROOF RD56 J 2E	
Q37 ,38	V01-0733-40	2SA733(A)(Q,P)		R47 -50	R43-1247-05	FL-PROOF RD47 J 2E	
106 1B	W02-0045-05	FM FRONT END KR-750	*	R51 -54	R43-1247-95	FL-PROOF RD4.7 J 2E	
106 1B	W02-0050-05	FM FRONT END KR-730	*	R55 -57	R43-1247-05	FL-PROOF RD47 J 2E	
AUDIO AMP (X09-148*-**)				R59 -62	R43-1256-05	FL-PROOF RD56 J 2E	
201 3A	-	METALLIC FRAME		R63 -66	R92-0166-05	RESISTOR 0.22 K 3A	
202 2A	-	HEAT SINK		R67 -70	R92-0205-05	RESISTOR 0.1 K 3A	
-	C91-0023-05	CERAMIC 0.01UF AC250V	M	R71 ,72	R43-1256-05	FL-PROOF RD56 J 2E	
-	C91-0079-05	CERAMIC 0.01UF AC125V	KE	R73 ,74	R47-5547-95	FL-PROOF RS4.7 J 3D	
-	C91-0079-05	CERAMIC 0.01UF AC125V	P	R75	R43-1210-25	FL-PROOF RD1K J 2E	
C1 ,2	C46-1733-25	MYLAR 0.0033UF J		R107	R43-1210-25	FL-PROOF RD1K J 2E	
C3 ,4	C46-1718-35	MYLAR 0.018UF J		R108	R43-1212-25	FL-PROOF RD1.2K J 2E	
C5 ,6	C81-6522-47	TANTAL 0.22UF 35WV		R109	R47-5616-15	FL-PROOF RS180 J 3F	
C7 ,8	C25-1710-57	LL-ELEC 1UF 50WV		R110	R47-5515-15	FL-PROOF RS150 J 3D	
C9 ,10	C71-1710-15	CERAMIC 100PF J		R111	R47-5656-15	FL-PROOF RS560 J 3F	
C11 ,12	C52-1747-16	CERAMIC 470PF K		R113,114	R47-5447-95	FL-PROOF RS4.7 J 3A	
C13 ,14	C71-1710-02	CERAMIC 10PF D		R115,116	R40-8356-16	FL-PROOF RC560 K 2H	KM
C15 ,16	C71-1715-06	CERAMIC 15PF K		R115,116	R40-8356-16	FL-PROOF RC560 K 2H	P
C17 ,18	C71-1705-01	CERAMIC 5PF C		R115,116	R47-5456-15	FL-PROOF RS560 J 3A	E
C19 ,20	C25-1733-57	LL-ELEC 3.3UF 50WV		R119,120	R43-1247-95	FL-PROOF RD4.7 J 2E	
C21 ,22	C24-1210-61	ELECTRO 10UF 16WV		R121	R92-0173-05	RC 2.2M M 2H	KP
C23 -26	C46-1782-25	MYLAR 0.0082UF J		R123	R43-1215-05	FL-PROOF RD15 J 2E	
C27 ,28	C46-1710-45	MYLAR 0.1UF J		VR1	R06-5061-05	POTENTIOMETER 100KBX2	*
C29 -31	C24-1710-71	ELECTRO 100UF 50WV		VR2	R01-5032-05	POTENTIOMETER 200KG	*
C32	C24-1747-61	ELECTRO 47UF 50WV		VR3 ,4	R06-4050-05	POTENTIOMETER 50KX2	*
C33 ,34	C90-0468-05	ELECTRO 6800UF 42WV		VR5 ,6	R12-3005-05	TRIMMING POT. 22K	
C35 ,36	C26-1447-67	NP-ELEC 47UF 25WV		VR7 ,8	R12-0056-05	TRIMMING POT. 100	
C37 ,38	C26-1410-67	NP-ELEC 10UF 25WV		VR9 ,10	R12-3302-05	TRIMMING POT. 10K	
C39 ,40	C46-1722-35	MYLAR 0.022UF J		-	S40-1022-05	PUSH SW (POWER)	M
C41 ,42	C46-1710-45	MYLAR 0.1UF J		-	S40-1024-05	PUSH SW (POWER)	KP
C43 ,44	C46-1710-35	MYLAR 0.01UF J		-	S40-1025-05	PUSH SW (POWER)	E
C45 ,46	C46-1747-35	MYLAR 0.047UF J		S1	S42-3045-05	PUSH SW (MODE/FILTER)	*
C47 ,48	C71-1712-16	CERAMIC 120PF K		S2	S40-2112-05	PUSH SW (LOUDNESS)	
C49 ,50	C52-1747-16	CERAMIC 470PF K		S3	S42-2040-05	PUSH SW (SPEAKERS)	*
C51 ,52	C24-1047-61	ELECTRO 47UF 10WV		D5 ,6	V11-5100-50	STV-4H	
C53	C24-1010-71	ELECTRO 100UF 10WV		D7 ,8	V11-0273-05	1S2076A	
C54 ,55	C24-1410-81	ELECTRO 1000UF 25WV		D9	V11-0254-05	YZ-140	
C56	C24-1247-61	ELECTRO 47UF 16WV		D10	V11-0254-05	YZ-140	
C57	C24-6547-61	ELECTRO 47UF 35WV		D11 -14	V11-0273-05	1S2076A	
C58	C24-6510-69	ELECTRO 10UF 35WV		D15 -18	V11-0423-05	1N601Fi	
C59 ,60	C54-2710-39	CERAMIC 0.01UF P		D20 ,21	V11-0219-05	V06B	
C61	C24-1010-71	ELECTRO 100UF 10WV		D22	V11-4103-60	XZ-051	
C62	C24-1747-61	ELECTRO 47UF 50WV		D23 ,24	V11-4105-10	XZ-245	
C64	C24-1410-71	ELECTRO 100UF 25WV		D25 -28	V11-0465-05	GP25D	
C100	C24-1410-71	ELECTRO 100UF 25WV		Q1 ,2	V01-0979-20	2SA979(G,H)	
-	E40-0273-05	PIN CONNECTOR (2P)		Q3 -6	V01-1023-20	2SA1023(Q,P)	
203 2B	E11-0060-15	PHONE JACK		Q7 ,8	V03-1845-60	2SC1845(1)	
204 1A	E20-0813-05	SPEAKER TERMINAL BOARD		Q9 ,10	V01-0992-10	2SA992(F,E)	
F1 -3	F05-2023-05	FUSE 2A 250V FIG.205	M	Q11 ,12	V03-0270-05	2SC945(R,Q)	
F1 -3	F05-2029-05	FUSE F2A 250V FIG.205	E	Q13 ,14	V03-2590-10	2SC2590(Q,R,S)	
F1	F05-4021-05	FUSE 4A 250V FIG.205	KP	Q15 ,16	V01-1110-10	2SA1110(Q,R,S)	
F3	F05-2021-05	FUSE 2A 250V FIG.205	KP	Q17 ,18	V01-1103-20	2SA1103(O,Y)	
206 1B	J13-0055-05	FUSE HOLDER		Q19 ,20	V03-2578-20	2SC2578(O,Y)	
207 2B	J19-0506-05	PC BOARD SUPPORT		Q21 ,22	V03-2003-00	2SC2003	
				Q23 -26	V03-0270-05	2SC945(R,Q)	

PARTS LIST

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Ref. No. 参照番号	Parts No. 部品番号	Description 部品名 / 規格	Re- marks 備考
Q27 Q28 ,29 Q30 Q31	V04-0762-00 V03-0270-05 V01-1110-10 V03-2003-00	2SD762 2SC945(R,G) 2SA1110(Q,R,S) 2SC2003	
FRONT END (W02-0050-00)			
IC1 Q1 Q2	V30-0345-10 V09-0121-10 V09-0124-20	SC114 2SK55 2SK61	
Ref. No. 参照番号	Parts No. 部品番号	Description 部品名 / 規格	Re- marks 備考
KR-750 UNIT			
1 3B 2 1B 3 1A 4 3A 5 3A	- - - - -	METALLIC FRAME REAR PANEL BOTTOM PLATE ESCUTCHEON (VOLUME) ESCUTCHEON (TUNING)	
6 3A 7 3A,3B 8 3A	- - -	DRESS PLATE HOLDER (DIAL CALIB) RAIL	
10 1A 11 3A 11 3A 11 3A 11 3A	A01-0382-03 A20-1655-03 A20-1655-03 A20-1655-03 A20-1655-03	METALLIC CABINET FRONT PANEL ASSY FRONT PANEL ASSY FRONT PANEL ASSY FRONT PANEL ASSY	*K PU MH XE
11 3A 11 3A 11 3A 12 1A 13 1A	A20-1655-03 A20-1656-03 A20-1687-03 A50-0080-03 A50-0081-03	FRONT PANEL ASSY FRONT PANEL ASSY FRONT PANEL ASSY SIDE PLATE (L) SIDE PLATE (R)	UE *T *K
- - - - -	B46-0055-20 B46-0060-00 B46-0061-20 B46-0062-20 B46-0062-20	WARRANTY CARD WARRANTY CARD WARRANTY CARD WARRANTY CARD WARRANTY CARD	P T KX UH UE
- - - - -	B46-0063-13 B46-0063-13 B46-0064-20 B50-3178-00 B50-3178-00	WARRANTY CARD WARRANTY CARD WARRANTY CARD INSTRUCTION MANUAL INSTRUCTION MANUAL	UH UE X *P UH
- - - - -	B50-3178-00 B50-3178-00 B50-3179-00 B50-3179-00 B50-3180-00	INSTRUCTION MANUAL INSTRUCTION MANUAL INSTRUCTION MANUAL INSTRUCTION MANUAL INSTRUCTION MANUAL	HX UE *P HX *T
- - - - -	B50-3181-00 B50-3183-00 B50-3209-00 B50-3216-00 B59-0018-00	INSTRUCTION MANUAL INSTRUCTION MANUAL INSTRUCTION MANUAL INSTRUCTION MANUAL SERVICE STATIONS' LIST	*E *K *M *K UH
- 14 3A 15 3A 16 3A 17 3A	B59-0018-00 B10-0264-04 B10-0272-04 B20-0474-02 B21-0044-05	SERVICE STATIONS' LIST FRONT GLASS (COUNTER) FRONT GLASS DIAL CALIBRATION DIAL POINTER ASSY	UE * *
18 2A,3B 19 2A,3B	B30-0230-05 B30-0231-05	LED (RED:ST,PRESET,PWR) LED (GREEN:SIG,ZERO PWR)	
C1	C55-1710-38	CERAMIC 0.01UF Z	
20 2B 21 3A,3B 22 1B 22 1B 22 1B	D15-0164-04 D15-0172-04 D32-0082-04 D32-0082-04 D32-0082-04	DIAL PULLEY PULLEY STOPPER (SWITCH) STOPPER (SWITCH) STOPPER (SWITCH)	UM HX TE
22 1B	D32-0082-04	STOPPER (SWITCH)	UE
23 1B 23 1B 23 1B 23 1B 23 1B	E03-0017-05 E03-0017-05 E03-0031-05 E03-0031-05 E03-0031-05	AC OUTLET AC OUTLET AC OUTLET AC OUTLET AC OUTLET	KP K UM HX UE
24 1B	E04-0004-05	FM RECEPTACLE	TE

Ref. No. 参照番号	Parts No. 部品番号	Description 部品名 / 規格	Re- marks 備考
25 1B 25 1B 25 1B 25 1B 25 1B	E30-0181-05 E30-0181-05 E30-0459-05 E30-0545-05 E30-0545-05	POWER CORD POWER CORD POWER CORD POWER CORD POWER CORD	KP K E UM H
25 1B 25 1B 25 1B	E30-0545-05 E30-0587-05 E30-0649-05	POWER CORD POWER CORD POWER CORD	UE T X
26 2B	G01-0045-24	COIL SPRING	
- - - - -	H01-3189-04 H01-3189-04 H01-3189-04 H01-3189-04 H01-3192-04	CARTON BOX CARTON BOX CARTON BOX CARTON BOX CARTON BOX	*K UM HX UE *E
- - - - -	H01-3193-04 H10-1556-02 H20-0416-04 H20-0454-04 H25-0078-04	CARTON BOX POLYSTYRENE FIXTURE COVER COVER BAG 235X315	*K M
27 1A 28 1A 29 3B 30 2A 31 1B	J02-0103-05 J19-0564-05 J19-0565-03 J19-0566-04 J41-0034-05	FOOT X4 HOLDER (ANTENNA) LED HOLDER (POWER IND) LED HOLDER (SIG,ST,PSET) BUSHING (POWER CORD)	KP
31 1B 31 1B 31 1B 31 1B 31 1B	J41-0034-05 J42-0084-05 J42-0084-05 J42-0084-05 J42-0084-05	BUSHING (POWER CORD) BUSHING (POWER CORD) BUSHING (POWER CORD) BUSHING (POWER CORD) BUSHING (POWER CORD)	K UM HT E UE
31 1B	J42-0085-05	BUSHING (POWER CORD)	X
32 3A,3B 33 3A,3B 33 3A,3B 34 3A 35 3A	K27-0130-04 K27-0131-04 K27-0131-04 K29-0336-04 K29-0337-04	KNOB (PWR,TAPE,SELECTOR) KNOB (SP,FILTER,MODE) KNOB (PSET,LOUD,IF-BAND) KNOB (AUTO TUNING) KNOB (VOLUME)	*K K *T E *P
36 3A 37 3A,3B 37 3A,3B	K29-0339-04 K29-0348-04 K29-0348-04	PRESET MARKER KNOB (BASS,TREBLE) KNOB (BALANCE)	*U MH X UE
38 2A 38 2A 38 2A 38 2A 38 2A	L01-2111-05 L01-2111-05 L01-2116-05 L01-2116-05 L01-2117-05	POWER TRANSFORMER POWER TRANSFORMER POWER TRANSFORMER POWER TRANSFORMER POWER TRANSFORMER	*K K *T E *P
38 2A 38 2A 38 2A 38 2A	L01-2118-05 L01-2118-05 L01-2118-05 L01-2118-05	POWER TRANSFORMER POWER TRANSFORMER POWER TRANSFORMER POWER TRANSFORMER	*U MH X UE
39 1B 40 1B 41 2B 42 2B,3A 43 1B	N08-0128-35 N09-0100-14 N09-0287-05 N09-0293-05 N09-0303-05	GND TERMINAL SCREW SCREW (M3X8; MOTOR ASSY) SCREW (M2.6X14; PULLEY) SCREW (M3X6; DIN CONN)	*
43 1B 43 1B 43 1B 44 1A 45 1B	N09-0303-05 N09-0303-05 N09-0303-05 N09-0308-05 N09-0362-05	SCREW (M3X6; DIN CONN) SCREW (M3X6; DIN CONN) SCREW (M3X6; DIN CONN) SCREW (M4X12; SIDE PLATE) SCREW (M2.6X16)	HX UE TE
46 3A,3B 47 1A,1B	N29-0035-05 S31-2046-05	RIVET SLIDE SW (VOLTAGE SEL)	UM
Ref. No. 参照番号	Parts No. 部品番号	Description 部品名 / 規格	Re- marks 備考
47 1A,1B 47 1A,1B 47 1A,1B	S31-2046-05 S31-2046-05 S31-2046-05	SLIDE SW (VOLTAGE SEL) SLIDE SW (VOLTAGE SEL) SLIDE SW (VOLTAGE SEL)	HA TE UL
- 48 2B 49 1A,1B	T90-0202-05 T49-0013-03 T90-0104-05	FM INDOOR ANTENNA MOTOR ASSY AM LOOP ANTENNA	
50 1B,3B 50 1B,3B 50 1B,3B 50 1B,3B 50 1B,3B	X05-1790-11 X05-1790-11 X05-1790-22 X05-1790-22 X05-1790-22	TUNER PCB ASSY TUNER PCB ASSY TUNER PCB ASSY TUNER PCB ASSY TUNER PCB ASSY	*K PK *U HX X
50 1B,3B 50 1B,3B 50 1B,3B 51 1A,2A 51 1A,2A	X05-1790-22 X05-1792-72 X05-1792-72 X09-1490-10 X09-1490-10	TUNER PCB ASSY TUNER PCB ASSY TUNER PCB ASSY AUDIO AMP PCB ASSY AUDIO AMP PCB ASSY	UE *T E *K PK
51 1A,2A 51 1A,2A 51 1A,2A 51 1A,2A 51 1A,2A	X09-1490-21 X09-1490-21 X09-1490-21 X09-1490-21 X09-1492-71	AUDIO AMP PCB ASSY AUDIO AMP PCB ASSY AUDIO AMP PCB ASSY AUDIO AMP PCB ASSY AUDIO AMP PCB ASSY	*U MH X UE *T
51 1A,2A 52 3B	X09-1492-71 X13-2800-10	AUDIO AMP PCB ASSY COUNTER PCB ASSY	E *
TUNER (X05-179*~**)			
Parts list for the TUNER section of the KR-750 are inserted into the KR-730 parts list. Parts only for the KR-750 or with the same reference number as in the KR-730 is distinguished by "750" written in the Remarks column.			
AUDIO AMP (X09-149*~**)			
201 3A 202 2A	- -	METALLIC FRAME HEAT SINK	
C1 ,2 C3 ,4 C5 ,6 C7 ,8 C9 ,10	C46-1710-35 C46-1715-46 C52-1739-16 C46-1727-35 C25-1433-57	MYLAR 0.01UF J MYLAR 0.15UF K CERAMIC 390PF J MYLAR 0.027UF K LL-ELEC 3.3UF 25WV	
C11 ,12 C13 ,14 C15 ,16 C17 -20 C21 ,22	C71-1733-06 C46-1715-35 C26-1010-77 C46-1722-35 C71-1703-01	CERAMIC 33PF K MYLAR 0.015UF J NP-ELEC 100UF 10WV MYLAR 0.022UF J CERAMIC 3PF C	
C23 ,24 C25 ,26 C27 ,28 C29 ,30 C31 ,32	C71-1747-05 C71-1715-06 C24-2010-51 C52-1739-16 C25-1433-57	CERAMIC 47PF J CERAMIC 15PF K ELECTRO 1UF 100WV CERAMIC 390PF K LL-ELEC 3.3UF 25WV	
C33 ,34 C35 ,36 C37 ,38 C39 ,40 C41 ,42	C71-1715-06 C71-1702-01 C24-1747-61 C24-1047-61 C91-0105-05	CERAMIC 15PF K CERAMIC 2PF C ELECTRO 47UF 50WV ELECTRO 47UF 10WV CERAMIC 0.0022UF J	

PARTS LIST

Ref. No. 参照番号	Parts No. 部品番号	Description 部品名 / 規格	Re- marks 備考
C43 ,44	C91-0116-05	CERAMIC 0.0047UF J	
C45 ,46	C91-0134-05	CERAMIC 0.1UF J	
C47 ,48	C24-1710-51	ELECTRO 1UF 50wv	
C49 ,50	C46-1733-25	MYLAR 0.0033UF J	
C51 ,52	C46-1747-35	MYLAR 0.047UF J	
C53 -56	C46-1710-35	MYLAR 0.01UF J	
C57	C24-1010-71	ELECTRO 100UF 10wv	
C58	C24-1247-61	ELECTRO 47UF 16wv	
C59	C24-1433-61	ELECTRO 33UF 25wv	
C61	C24-1010-71	ELECTRO 100UF 10wv	
C62	C71-1710-15	CERAMIC 100PF J	
C63	C24-1433-61	ELECTRO 33UF 25wv	
C64	C24-1247-61	ELECTRO 47UF 16wv	
C65	C24-1747-61	ELECTRO 47UF 50wv	
C66	C24-1022-71	ELECTRO 220UF 10wv	
C67	C24-1247-61	LL-ELEC 47UF 16wv	
C68 ,69	C90-0475-05	ELECTRO 8200UF 50wv	
C71 ,72	C46-1722-35	MYLAR 0.022UF J	
C73 ,74	C46-1710-45	MYLAR 0.1UF J	
C75 ,76	C26-1710-67	NP-ELEC 10UF 50wv	
C77 ,78	C46-1710-35	MYLAR 0.01UF J	
C79 ,80	C71-1718-16	CERAMIC 180UF K	
C81 ,82	C46-1727-25	MYLAR 0.0027UF J	
C83 ,84	C46-1768-36	MYLAR 0.068UF K	
C85 ,86	C24-1047-61	ELECTRO 47UF 10wv	
C87	C24-1710-51	ELECTRO 1UF 50wv	
C88 ,89	C24-1247-71	ELECTRO 470UF 16wv	
C90 -93	C54-2710-39	CERAMIC 0.01UF P	
C94	C24-1247-71	ELECTRO 470UF 16wv	
C95	C24-1710-71	ELECTRO 100UF 50wv	
C96	C91-0079-05	CERAMIC 0.01UF AC125V	E
C97 ,98	C46-1747-35	MYLAR 0.047UF J	
C99	C91-0023-05	CERAMIC 0.01UF AC250V	M
C99	C91-0079-05	CERAMIC 0.01UF AC125V	KE
203 20	E11-0060-15	PHONE JACK	
204 1A	E20-0813-05	SPEAKER TERMINAL BOARD	
F1 -3	F05-2023-05	FUSE 2A 250V FIG.205	M
F1 -3	F05-2029-05	FUSE F2A 250V FIG.205	E
F1	F05-4021-05	FUSE 4A 250V FIG.205	K
F3	F05-2021-05	FUSE 2A 250V FIG.205	K
206 2A	J13-0055-05	FUSE HOLDER	
207 2B	J19-0506-05	PC BOARD SUPPORT	
L1 ,2	L39-0085-05	COIL	
208 2A	N09-0287-05	SCREW (M3X8)	
R33 -36	R43-1210-25	FL-PROOF RD1K J 2E	
R37 ,38	R43-1210-15	FL-PROOF RD100 J 2E	
R39 ,40	R40-8356-26	FL-PROOF RC5.6K K 2H	
R41 -44	R43-1210-15	FL-PROOF RD100 J 2E	
R45 ,46	R43-1227-05	FL-PROOF RD27 J 2E	
R47 ,48	R43-1210-15	FL-PROOF RD100 J 2E	
R49 -52	R43-1227-05	FL-PROOF RD27 J 2E	
R53 -56	R43-1268-05	FL-PROOF RD68 J 2E	
R57 -60	R43-1282-05	FL-PROOF RD82 J 2E	
R65 -72	R92-0166-05	FIXED RESISTOR	
R83 ,84	R43-1227-15	FL-PROOF RD270 J 2E	
R93 ,94	R47-5547-95	FL-PROOF RS4.7 J 3D	
R95 ,96	R40-8310-06	FL-PROOF RC10 K 2H	
R97 ,98	R47-5410-05	FL-PROOF RS10 J 3A	
R99 ,100	R47-5456-15	FL-PROOF RS560 J 3A	
R101-103	R47-5510-15	FL-PROOF RS100 J 3D	
R104	R47-5556-05	FL-PROOF RS56 J 3D	
R112	R43-1268-05	FL-PROOF RD68 J 2E	
R117	R40-8327-26	FL-PROOF RC2.7K K 2H	
R120	R47-5433-05	FL-PROOF RS33 J 3A	
R122	R47-5510-25	FL-PROOF RS1K J 3D	
R128	R40-8322-16	FL-PROOF RC220 K 2H	
R129	R47-5568-15	FL-PROOF RS680 J 3D	
R163	R47-5516-15	FL-PROOF RS220 J 3D	
R165	R92-0173-05	RC 2.2M M 2H	K
VR1	R06-5058-05	POTENTIOMETER 200K	
VR2	R06-5057-05	POTENTIOMETER 100KX2	
VR3	R06-4047-05	POTENTIOMETER 50KX2	
VR4	R06-4048-05	POTENTIOMETER 50KX2	
VR5 ,6	R12-3028-05	TRIMMING POT. 20K	
VR7 ,8	R12-0056-05	TRIMMING POT. 100	
-	S40-1022-05	PUSH SW (POWER)	
-	S40-1024-05	PUSH SW (POWER)	
-	S40-1025-05	PUSH SW (POWER)	
-	S51-2038-05	RELAY	
S1	S42-3043-05	PUSH SW (MODE,FILTER)	
S2	S40-2112-05	PUSH SW (LOUDNESS)	
S3	S42-2037-05	PUSH SW (SPEAKERS)	
D5 ,6	V11-0271-05	1S2076	
D7 ,8	V21-0013-05	STV-3H(Y)	
D9 ,10	V11-0271-05	1S2076	
D11 -18	V11-0273-05	1S2076A	
D19 ,20	V11-0243-05	WZ-061	
D21 ,22	V11-0273-05	1S2076A	
D23 ,24	V11-0271-05	1S2076	
D25	V11-4161-76	XZ-137	
D27	V11-0273-05	1S2076A	
D30 ,31	V11-0271-05	1S2076	
D32	V11-0295-05	W06B	
D33 -36	V11-0423-05	IN60	
D38	V11-0219-05	V06B	
D39	V11-0271-05	1S2076	
D40	V11-0219-05	V06B	
D41 -48	V11-0465-05	GP25D	
D49	V11-0219-05	V06B	
D50	V11-0200-05	V06C	
Q1 -4	V01-0979-10	2SA979(F,G)	
Q5 -8	V03-2631-10	2SC2631(Q,R)	
Q9 ,10	V01-1123-10	2SA1123(Q,R)	
Q11 ,12	V03-2590-10	2SC2590(Q,R)	
Q13 ,14	V01-1110-10	2SA1110(Q,R)	
Q15 ,16	V01-1075-30	2SA1075	
Q17 ,18	V03-2525-30	2SC2525	
Q19 ,20	V01-1023-00	2SA1023	
Q21 ,22	V03-1845-00	2SC1845	
Q23	V03-2631-10	2SC2631(Q,R)	
Q24	V03-0297-05	2SC945	
Q25	V04-0762-00	2SD762	
Q26 ,27	V03-0297-05	2SC945	
Q28	V03-2590-10	2SC2590(Q,R)	
Q28 ,29	V11-5105-40	TF620M	
Q29 -31	V01-0733-90	2SA733(A)	
Q32	V03-2378-00	2SC2378	
Q33	V01-1023-00	2SA1023	
Q34	V03-2378-00	2SC2378	
Q35	V01-0992-00	2SA992	

PARTS LIST

Ref. No. 参照番号	Parts No. 部品番号	Description 部品名 / 規格	Re- marks 備考
Q36 ,37	V03-0297-05	2SC945	
Q38	V03-2378-00	2SC2378	
Q39	V01-0954-00	2SA954	
Q40 ,41	V03-1845-00	2SC1845	
Q42	V03-2003-00	2SC2003	
Q43	V03-2590-10	2SC2590(Q,R)	
COUNTER (X13-2800-10)			
C1 -4	C55-1710-38	CERAMIC 0.01UF Z	
C7 -11	C52-1715-26	CERAMIC 0.0015UF K	
C12	C55-1747-38	CERAMIC 0.047UF Z	
C13	C52-1715-26	CERAMIC 0.0015UF K	
C17	C71-1782-05	CERAMIC 82PF J	
C19	C24-1022-61	ELECTRO 22UF 10wv	
C20 ,21	C63-1727-05	CERAMIC 27PF J	
C22	C52-1715-26	CERAMIC 0.0015UF K	
C23	C55-1710-38	CERAMIC 0.01UF Z	
C24	C24-1210-61	ELECTRO 10UF 16wv	
-	E23-0047-04	TERMINAL	
X1	L77-0574-05	CRYSTAL RESONATOR	
K1	R43-1218-15	FL-PROOF RD180 J 2E	
R3	R47-5427-15	FL-PROOF RS270 J 3A	
R10	R47-5412-15	FL-PROOF RS120 J 3A	
VR1 ,2	R12-3045-05	TRIMMING POTENTIOMETER	
-	V40-4400-20	FIP7B8S (FLUO. DISPLAY)	
D2 -4	V11-0271-05	1S2076	
IC1	V30-0409-10	AN6821	
IC2	V30-1005-26	SN74LS90N	
IC3	V30-0474-10	LC7258	
Q1 ,2	V01-0733-40	2SA733(A)(Q,P)	
Q3 ,4	V03-0297-05	2SC945	
FRONT END (W02-0045-00)			
IC1	V30-0345-10	SC114	
Q1	V09-0121-10	2SK55	
Q2	V09-0124-20	2SK61	